PB85-207611

Emission Inventory for Urban Particle Model Validation in the Philadelphia AQCR (Air Quality Control Region)

Engineering-Science, Fairfax, VA

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

May 85

U.S. Department of Commerce
National Technical Information Service
NTIS

PB85-207611

EPA/600/3-85/041
May 1985

AN EMISSION INVENTORY FOR URBAN PARTICLE MODEL VALIDATION IN THE PHILADELPHIA AQCR

by

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Contract No. 68-02-3509

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NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO.
EPA/600/3-85/041		PB85 207611/AS

4. TITLE AND SUBTITLE	5. REPORT DATE
AN EMISSION INVENTORY FOR URBAN PARTICLE MODEL VALIDATION IN THE PHILADELPHIA AQCR	May 1985
	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)	8. PERFORMING ORGANIZATION REPORT NO.
D.A. Toothman, J.C. Thames, J.C. Yates, R.R. Segall, and J.N. Bolstad	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT NO.
Engineering-Science 10521 Rosehaven Street Fairfax, Virginia 22030	CDTA1D/02 - 2285 (FY-85)
	11. CONTRACT/GRANT NO.
	Contract No. 68-02-3509
12. SPONSORING AGENCY NAME AND ADDRESS	13. TYPE OF REPORT AND PERIOD COVERED
Atmospheric Sciences Research Laboratory - RTP, NC Office of Research and Development U.S. Environmental Protection Agency Research Triangle Park, NC 27711	Final 6/82-9/84
	14. SPONSORING AGENCY CODE
	EPA/600/09

15. SUPPLEMENTARY NOTES

16. ABSTRACT

The U. S. Environmental Protection Agency (EPA) is in the process of revising the National Ambient Air Quality Standards for total suspended particulates (TSP) to account for the fact that smaller particles are responsible for adverse health effects. The new standard has not been finalized but is expected to be for PM_{10}, particulate matter with aerodynamic diameters of 10 microns or below. The states will be required to revise their State Implementation Plans (SIPs) for attainment or maintenance of the standard. For the States use, EPA is developing and will validate an Urban Particle Model. Philadelphia was chosen as the site for a validation study because it has a good mix of industrial emissions and is the site of an EPA validation program for the Urban Airshed photochemical oxidant model.

Ambient data were collected from 6 p.m. July 14 to 6 p.m. August 13, 1982, at six sites in the Philadelphia area. To assist in the validation program, an emissions input for the urban particle model was obtained. Hourly emissions estimates during the monitoring period for the pollutants fine particles, coarse particles, fine primary sulfate, coarse primary sulfate, and sulfur dioxide are included. All point sources other than 300 major point sources were combined into the 289, 2.5-by2.5 kilometer grid cells used for area sources and highway vehicles.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS (This Report)	21. NO. OF PAGES
RELEASE TO PUBLIC	UNCLASSIFIED	624
	20. SECURITY CLASS (This page) UNCLASSIFIED	22. PRICE

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

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The information in this document has been funded by the United States Environmental Protection Agency contract No. 68-02-3509 to Engineering-Science. It has been subject to the Agency's peer and administrative review, and it has been approved for publication as an EPA document. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

ABSTRACT

The U.S. Environmental Protection Agency (EPA) is in the process of revising the National Ambient Air Quality Standards for total suspended particulates (TSP) to account for the fact that smaller particles are responsible for adverse health effects. The new standard has not been finalized but is expected to be for PM_{10}, particulate matter with aerodynamic diameters of 10 microns or below.

After the new standard is promulgated, the states will be required to revise their State Implementation Plans (SIPs) for attainment or maintenance of the standard. The development and validation of an urban particle model for the states to use is the responsibility of the Environmental Sciences Research Laboratory (ESRL). ESRL chose Philadelphia for a validation study because it has a good mix of industrial emissions and is the site of an EPA validation program for the Urban Airshed photochemical oxidant model.

Ambient data were collected from 6 p.m. July 14 to 6 p.m. August 13, 1982, at six sites in the Philadelphia area. To assist ESRL in the validation program, Engineering-Science (ES) prepared emissions input for the urban particle model, PEM-2. ES developed hourly emission estimates during the monitoring period for five pollutants: fine particles (<2.5 microns), coarse particles (2.5-10 microns), primary sulfate <2.5 microns, primary sulfate between 2.5 and 10 microns, and sulfur dioxide. All point sources other than 300 major point sources were combined into the 289, 2.5-by-2.5 kilometer grid cells used for area sources and highway vehicles. Highway vehicle emissions data were generated by the Delaware Valley Regional Planning Commission under subcontract to ES. ES conducted limited source testing and collected silt loading samples from selected paved roads to provide Philadelphia-specific data for model validation.

Model results should be interpreted keeping in mind that the emissions data developed do not represent real-time conditions. The use of relatively large 2.5-by-2.5 kilometer grids in the study complicates model validation since impacts from paved roads very near the monitors are likely to be the most significant contributors. In addition, several of the monitoring sites used to collect ambient data exhibit microscale source influences and one is located on top of a building, making comparisons with model predictions more problematical.

This report was submitted in fulfillment of Work Assignment No. 30 of Contract No. 68-02-3509 by ES under the sponsorship of the EPA. This report covers a period from May 1982 to September 1984, and work was completed as of September 1984.

CONTENTS

Abstract iii
Figures vii
Tables viii

1. Introduction 1
   - Background 1
   - Project approach 1
   - Report organization 4

2. Field Testing Program 5
   - Introduction 5
   - Identification of candidate emission points for testing 5
   - Facility contacts/pretest surveys/emission point selection 7
   - Emission point testing and results 9
   - Selection of paved roads for sampling 20
   - Paved road sampling and results 22
   - Monitoring site evaluation 27
   - References 30

3. Annualized Point and Industrial Process Fugitive Source Inventory 31
   - Introduction 31
   - Point source inventories obtained from regulatory agencies 31
   - Major/minor point source division 48
   - Industrial process fugitive source inventory 49
   - References 56

4. Annualized Area Source Inventory 57
   - Introduction 57
   - 1. Fuel use 62
   - 2. Construction activity 66
   - 3. Construction equipment 71
   - 4. Industrial equipment 73
   - 5. Small gasoline engines 79
   - 6. Aircraft 84
   - 7. Vessels 88
   - 8. Railroads 99
   - 9. Forest fires 99

10. Agricultural burning 102
11. Prescribed burning 104
12. On-site incineration 107
13. Structural fires 110
14. Agricultural equipment 110
15. Agricultural tilling activity 119
16. Unpaved roads 119
17. Unpaved airstrips 122
References 127

5. Particle Size, Sulfate, and Sulfur Dioxide Factors 131
Introduction 131
Data sources 131
Point and industrial process fugitive source factors 137
Area source factors 145
Highway vehicle factors 145
References 156

6. Temporal Resolution of Emissions 159
Introduction 159
Point and IPFPE sources 159
Area sources 162
References 167

7. Preparation of Model Input 168
Introduction 168
Data processing system 168
Component distributions 169
Temporal distributions 171
Intermediate processing 171
Output data 174

Appendices

A. Tables of Candidate Point Sources for Testing 177
B. Point Source Test Results 196
C. Highway Vehicle Emissions Inventory Documentation 233
D. NEDS County Area Source Input Forms 300
E. Area Source Grid Allocation Data 309
F. Particle Size, Sulfate, and SO_2 Files 467
G. Temporal Files 478
H. Major Sources for Modeling 607

FIGURES

Number		Page
1.1	Location of ambient monitoring sites	2
2.1	Harshaw Chemical (antimony roaster) particle size results - test 1	12
2.2	Harshaw Chemical (antimony roaster) particle size results - test 2	13
2.3	Harshaw Chemical (antimony roaster) particle size results - test 3	14
2.4	BP Oil (catalytic cracker) particle size - test 1	15
2.5	BP Oil (catalytic cracker) particle size - test 2	16
2.6	Allied Chemical (sulfuric acid plant) particle size results - test 1	17
2.7	Allied Chemical (sulfuric acid plant) particle size results - test 2	18
2.8	Allied Chemical (sulfuric acid plant) particle size results - test 3	19
4.1	Area source grid system	61

TABLES

Number		Page
2.1	Summary of source contacts	8
2.2	Point source testing summary	10
2.3	Particle size testing summary	11
2.4	Candidate roadways for silt load sampling	21
2.5	Paved road sampling summary	24
2.6	Average silt load for typical Philadelphia roads by road category	25
2.7	Comparison of MRI-reported and Philadelphia silt load values	26
3.1	Emissions from selected point source categories, Philadelphia County, Pennsylvania	34
3.2	Emissions from selected point source categories, Bucks County, Pennsylvania	35
3.3	Emissions from selected point source categories, Chester County, Pennsylvania	36
3.4	Emissions from selected point source categories, Delaware County, Pennsylvania	37
3.5	Emissions from selected point source categories, Montgomery County, Pennsylvania	38
3.6	Emissions from selected point source categories, Burlington County, New Jersey	39
3.7	Emissions from selected point source categories, Camden County, New Jersey	40
3.8	Emissions from selected point source categories, Gloucester County, New Jersey	41
3.9	Emissions from selected point source categories, Mercer County, New Jersey	42
3.10	Emissions from selected point source categories, Salem County, New Jersey	43
3.11	Emissions from selected point source categories, New Castle County, Delaware	44
3.12	Emissions from selected point source categories, Philadelphia AQCR	45
3.13	Top 50 emission points ranked by emission intensity for TSP	46
3.14	Top 50 emission points ranked by emission intensity for SO_x	47
3.15	Emission factor equations for storage piles	52
3.16	Emission factor equations for vehicle traffic on paved and unpaved roads	54

3.17 Industrial process fugitive particulate emission inventory (tons per year of TSP) 55

4.1 Categories of area sources 58
4.2 Summary of 1982 area source emissions 60
4.3 Population for 1982 63
4.4 1982 employment projections 64
4.5 Residential, commercial/institutional, and industrial fuel use emission factors 67
4.6 1982 area source fuel use emissions (tpy) 68
4.7 1980 acres of construction for Pennsylvania and New Jersey 69
4.8 Acres of construction by county 70
4.9 1982 construction activity emissions (tpy) 72
4.10 Construction equipment emission factors 74
4.11 1982 construction equipment emissions (tpy) 75
4.12 1982 industrial equipment activity 76
4.13 Industrial equipment emission factors 77
4.14 1982 industrial equipment emissions (tpy) 78
4.15 Small gasoline engine data 80
4.16 Fuel consumption by small gasoline engines 81
4.17 Small gasoline engines emission factors 82
4.18 1982 small gasoline engine emissions (tpy) 83
4.19 Fleet mix classification 85
4.20 Aircraft class emission factors 87
4.21 1982 aircraft emissions (tpy) 89
4.22 Commercial vessel activity for 1982 91
4.23 Pennsylvania state total motorboat registrations (1978) 92
4.24 Pennsylvania county motorboat population (1978) 93
4.25 New Jersey county motorboat population (1977) 95
4.26 Annual gasoline consumption of motorboats 96
4.27 Weighted vessel emission factors 97
4.28 1982 vessel emissions (tpy) 98
4.29 Rail locomotives emission factors 100
4.30 1982 railroad locomotive emissions (tpy) 101
4.31 1982 forest fire emissions (tpy) 103
4.32 Agricultural burning emission factors 105
4.33 1982 agricultural burning emissions (tpy) 106
4.34 1982 prescribed burning emissions (tpy) 108
4.35 Incinerator emission factors 109
4.36 1982 on-site incineration emissions (tpy) 111
4.37 Number of structural fires by county 112
4.38 Emission factors used for structural fires 113
4.39 1982 structural fire emissions (tpy) 114
4.40 Farm machinery usage data 116
4.41 Agricultural equipment emission factors 117
4.42 1982 agricultural equipment emissions (tpy) 118
4.43 1977 tilling activity data 120
4.44 1982 agricultural tilling emissions (tpy) 121
4.45 1982 unpaved road data by county 123
4.46 Unpaved airstrip data by county 125

4.47 1982 unpaved airstrip emissions (tpy) 126

5.1 Pollutant factors for urban particle model 138
5.2 Area source pollutant factor references 146
5.3 Silt loading values for Philadelphia 149
5.4 Highway vehicle particulate emission factors 150
5.5 Sulfate emission factors for highway vehicles 152
5.6 Percentage of light duty gasoline vehicles by catalyst type 1975-1982 153
5.7 Weighted average emission factors for catalyst-equipped vehicles 1975-1982 154
5.8 Sulfur dioxide emission factors for highway vehicles 155

7.1 Format for particle size distribution factors 170
7.2 Format for temporal distribution factors 172
7.3 Format for intermediate emission records 173
7.4 Format for output records 175
7.5 Format for point source stack data 176

SECTION 1

INTRODUCTION

BACKGROUND

The United States Environmental Protection Agency (EPA) is in the process of revising the National Ambient Air Quality Standards for total suspended particulates (TSP). The reference method for determining ambient concentrations of TSP collects particles with aerodynamic diameters of about 30 microns and below. It is only the smaller particles, however, that become deposited on lung tissue and cause adverse pulmonary effects. The particle diameter cutoff for the new air quality standard has not yet been finalized but is expected to be around 10 microns. Thus the new standard would be for PM_{10}, particulate matter with aerodynamic diameters of 10 microns or below.

After the new standard is promulgated, the States will be required to revise their existing State Implementation Plans (SIPs) for attainment or maintenance of the standard. The Office of Air Quality Planning and Standards (OAQPS) has undertaken a program to have a validated urban particle model, the Pollution Episodic Model (PEM-2), for the states to use. The development and validation of this model is the responsibility of the Environmental Sciences Research Laboratory (ESRL). An initial validation study is underway with emissions data and measurements from the Regional Air Pollution Study conducted in St. Louis. OAQPS requested a second validation study in a city with different characteristics. The Philadelphia area was chosen for this validation study because it has a good mix of industrial type emissions and is the site of the current EPA validation program for the Urban Airshed photochemical oxidant model in which Engineering-Science (ES) participated. ES is assisting ESRL by preparing emissions input for the urban particle model. PEM-2 is a specially modified version of the Texas Episodic Model (TEM).

PROJECT APPROACH

Ambient data for the validation program were collected from 6 p.m. July 14 to 6 p.m. August 13, 1982, at six sites in the Philadelphia area. Four of the sites have monitors operated by the Philadelphia Air Management Services, and the other two are used by the New Jersey Department of Environmental Protection to collect ambient data. The sites were selected by ESRL from the monitoring sites in operation at that time which best suited the goals of the program. The locations of the monitoring sites are shown in Figure 1.1. Continuous measurements of SO_2 were collected at each of

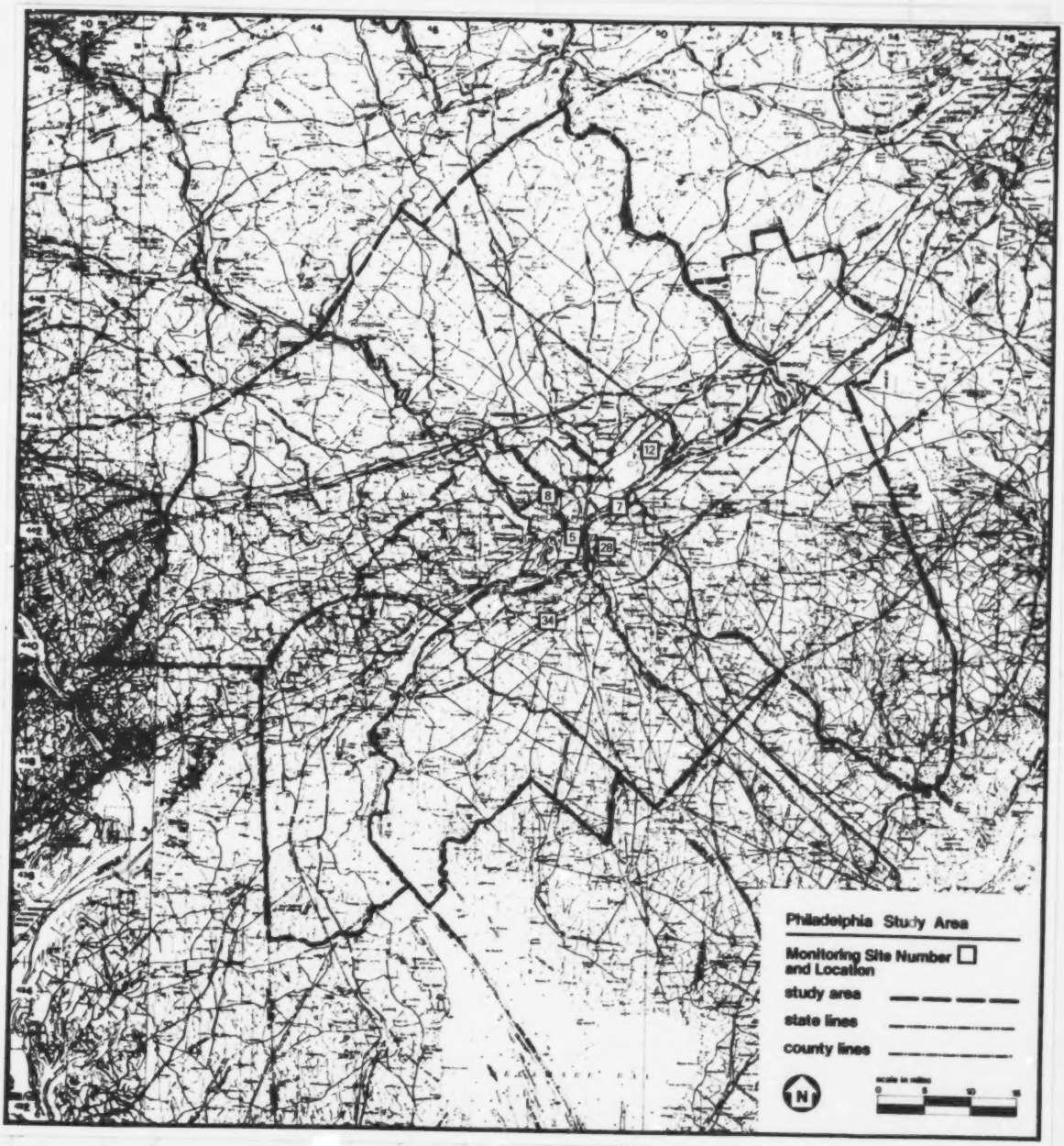

Figure 1.1 Location of Ambient Monitoring Sites

the sites as well as 12-hour samples of particulates and a number of meteorological variables.

The basic model input requirements defined by ESRL included hourly emissions during the monitoring period of five pollutants:

- o particles with diameters less than 2.5 microns (fine particles)
- o particles with diameters between 2.5 and 10 microns (coarse particles)
- o primary sulfate with diameters less than 2.5 microns
- o primary sulfate with diameters between 2.5 and 10 microns
- o sulfur dioxide

Emissions from all sources other than major point sources (a maximum of 300 major point sources is allowed) were to be combined into a grid system based on the system used in the Philadelphia Urban Airshed model validation program. The Airshed model grid system consisted of 502 square grid cells 5 kilometers on a side. Because sufficient information existed to identify emissions on a smaller geographic scale, it was decided to subdivide the 5 kilometer grid cells into four smaller cells with 2.5 kilometer sides. The Airshed model grid system covered the entire Air Quality Control Region (AQCR), an area much larger than needed for the particle model since the validation monitors were located in or near Philadelphia County. A square grid system was selected which encompassed the Philadelphia urbanized area and included all of Philadelphia County to the North and East and extended well beyond the monitoring site locations to the West and South. The resulting grid system consisted of 289 grid cells and included all of Philadelphia County and portions of Bucks, Chester, Delaware, and Montgomery Counties in Pennsylvania and Burlington, Camden, and Gloucester Counties in New Jersey. With this smaller grid system, modeling costs could be minimized while retaining emissions data important for model validation. The grid system used in this study is shown in Figure 4.1.

Work began on the project in May 1982 and most of the technical effort was completed by February 1983. A limited field sampling program was integrated into the study to provide Philadelphia source-specific pollutant detail for model validation. A few source tests were included to collect more accurate emission rates of the required pollutants during the monitoring period. In addition, silt loading samples on paved roads were collected to better quantify reentrained road dust emissions on Philadelphia streets. A TSP modeling study previously conducted by ES in the Philadelphia area showed reentrained road dust to be the single most significant contributor to ambient TSP concentrations. To the extent possible, the field sampling program was conducted during the time period that ambient data were being collected.

Highway vehicle emission data for the Airshed model validation effort were compiled by the Delaware Valley Regional Planning Commission (DVRPC). Because DVRPC possesses the necessary traffic data, development of highway vehicle emissions for input to the urban particle model was subcontracted to DVRPC. ES assisted DVRPC by providing all emission factors necessary to generate highway vehicle emissions.

The first major task for the preparation of the emissions inventory was to plan and conduct the field testing program designed to obtain Philadelphia source-specific emissions information. The next task was to assemble annualized emission data for point and area sources in Emission Inventory Subsystem/Permits and Registration (EIS/P&R) format. Data files containing temporal and particle size/sulfate/sulfur dioxide factors were then generated. These data files, along with the EIS/P&R masterfiles, were input into a module of the ES air quality system, which output data in the format required by the urban particle model. DVRPC provided gridded hourly emissions values for the pollutants required by the model. ES supplied appropriate emission factors to DVRPC and placed the emissions data in modeling format.

The four regulatory agencies that exist in the Philadelphia AQCR provided the most recent annualized point source data available. The annualized area source inventories were compiled to the extent possible from two recent studies conducted by ES in the Philadelphia area. These studies are documented in Emissions Inventories for Urban Airshed Model Application in the Philadelphia AQCR and A Study of Existing and Projected Particulate Levels in the Southeast Pennsylvania Air Basin.

REPORT ORGANIZATION

The organization of this report reflects the general procedures employed. Section 2 discusses the field testing program. Sections 3 and 4 describe the methods used to develop EIS/P&R masterfiles for point and area sources. Sections 5 and 6 address the particle size/sulfate/sulfur dioxide factor development and the generation of temporal data, respectively. Finally, Section 7 describes the process of developing particle model emissions input. The appendices contain detailed information used in the study.

SECTION 2

FIELD TESTING PROGRAM

INTRODUCTION

Initially, the purpose of the field testing program was to obtain emissions data for a few of the most significant emission points (stacks) during the period of ambient monitoring (July/August 1982). This would serve not only to characterize the pollutants emitted from selected points in the Philadelphia area but also to quantify emission rates while the monitoring was being conducted. These data were expected to be very beneficial for the model validation effort. Because it was envisioned that a great deal of lead time would be necessary before testing could be initiated, the field testing program was the first task undertaken by ES.

During the process of selecting emission points to be tested, source impacts on monitoring sites in the Philadelphia area were considered. A previous modeling study completed by ES for the Southeast Pennsylvania Air Basin showed that paved road emissions had the most significant impact on TSP concentrations at the four Pennsylvania sites used in the urban particle model monitoring program. As a result, it was decided to allocate a portion of the funds set aside for the field testing program to collect and analyze paved road silt loading samples on Philadelphia streets.

Since the field testing program consisted of two distinct parts, i.e., stack tests and paved road sampling, the remainder of this chapter is divided accordingly. First, the identification of candidate emission points is discussed followed by emission point selection, testing, and results. The selection of paved roads for sampling is then addressed followed by a discussion of paved road sampling and results. The last topic is a brief discussion of emission sources near the monitoring sites. This information is to be used at a later time to assist in interpreting model results.

IDENTIFICATION OF CANDIDATE EMISSION POINTS FOR TESTING

Sufficient resources were originally allocated to this portion of the project to test eight to ten emission points in the Philadelphia area. In order to select candidate emission points for testing, the following criteria were considered:

- Major emission points of either particulates or sulfur oxides. For this criterion, a major emission point was defined as having actual

emissions greater than 50 tons per year of either particulates or SO_x.

- Location near monitoring sites used for gathering PM_{10} air quality data. This criterion is important in order to identify emission points likely to have a major impact upon the monitoring sites.

- Representativeness of processes. The processes selected should be representative of other similar processes in the area so that the test results could have broader applicability.

- Representativeness of control equipment. It is likely that various types of control equipment have different efficiencies for different particle sizes.

- Duplication of processes. Because some facilities may be reluctant to allow ES to test, an effort was made to identify several emission points wherever possible that could be tested for important processes and/or control equipment types.

These criteria were not used rigorously because it was discovered that the types of processes and control equipment types in the area near the monitors were limited.

A step-wise procedure was used to select sources based on the criteria given above. The following steps were included in this procedure:

1. Points with particulate or SO_x emissions greater than 50 tons per year were retrieved from the Philadelphia oxidant emissions inventory for 1979.

2. The largest emission points in the Philadelphia Air Quality Control Region (AQCR) were summarized. This summary is shown in Table 1 of Appendix A.

3. Points within approximately 10 kilometers of a monitoring site were identified and are summarized in Table 2 of Appendix A.

4. It was determined that many of the sources in Table 1 were some distance from the monitors. Therefore, smaller sources closer to the monitors might have higher impacts. Since stack heights in the Philadelphia area are generally below 250 feet, a distance of 10 km from the monitors was selected based on modeling expertise which indicates that the maximum impact from such sources would occur within 10 km. The types of processes included in Tables 1 and 2 were summarized and are shown in Table 3 of Appendix A.

5. Using the selection criteria, sources from Tables 1 and 2 were chosen.

6. Priorities were assigned to emission points selected in Step 5 based upon the selection criteria.

7. The facilities were initially contacted to determine their acceptability for sampling. Some points were shutdown, some did not have sampling ports, and some facilities refused to allow sampling. These contacts are discussed in the next topic of this section.

8. Additional alternate points were identified from Tables 1 and 2 to ensure that major processes would be included in the sampling program. In general, many of these points were located at facilities identified in the earlier steps.

A prioritized listing of points for sampling is given in Table 4 of Appendix A. The list of alternate points by process category is given in Table 5 of Appendix A. After completion of the facility contacts and the pretest surveys, the selection of emission points to be tested was made. These activities are also discussed in the portion of the report that follows.

FACILITY CONTACTS/PRETEST SURVEYS/EMISSION POINT SELECTION

After the list of candidate sources had been assembled, staff members were assigned to secure the best available contact for obtaining permission and cooperation from the facilities. This was considered to be very important to the success of the project, as subsequent developments showed. As previously mentioned, less than 100% cooperation was expected so the source list contained several more names than tests planned. Attempts were made to contact every source on the list. Before the contacts were initiated, it was attempted to rank the facilities in order of importance. The rankings took into account magnitude of emissions, nearness to receptor sites, source type (representative of sources in the area), likelihood of existing data for model evaluation, and some subjective evaluations of the desirability of testing. These criteria were previously discussed in some detail. The resulting source lists are provided in Appendix A. Each source on the list was assigned a priority number and contacts made.

Table 2.1 summarizes the results of the initial contacts. The table contains responses falling into three categories, which are, in effect, yes, no, and maybe. Our previous experience had prepared us for negative responses, but the actual response was worse than expected. It was envisioned that 8-10 sources out of the 25 candidates would be available for testing. We had planned on 50-60% agreement (12-15 sources) and a few more willing to cooperate but process or market conditions or the like to take them out of consideration. The table shows something quite different.

Table 2.1 includes only the corporations contacted, not all the sources involved. Pretest surveys were scheduled with the companies which had agreed to be tested. In some cases, this pretest visit was combined with a meeting to discuss the goals of the program because the contact had indicated some reservation about their participation. This was the case with Dupont, Harshaw, and Sun Oil. After completing these surveys and meetings, it was apparent that the number of possible tests would be severely limited. The potential sources at this juncture were the following:

TABLE 2.1

SUMMARY OF SOURCE CONTACTS

Source Name	Response
Philadelphia Electric	Agreed to participate but had some reservations
Public Service E&G	On strike when first contaced, later granted permission
Gulf Oil	No
Getty Oil	No
Mobil Oil	Declined to participate
Atlantic-Richfield	Declined to participate
Delmarva Power & Light	Control equipment operated by Getty - see Getty response
City of Philadelphia (Incinerators)	Strong aversion to being tested at the time
Phoenix Steel	Agreed to participate if test methods usable on sources
Dupont	Agreed to participate but had some stipulations
Texaco	Agreed to allow testing only if forced by law
Gulf & Western	Plant was not operating but declined anyway
Harshaw Chemical	Agreed to testing
U.S. Steel	Plant was operating at much reduced level

- o Philadelphia Electric (Eddystone) - coal-fired power plant
- o BP Oil - catalytic cracker
- o Harshaw Chemical - antimony roaster
- o Allied Chemical - sulfuric acid plant
- o Sun Oil - catalytic cracker (alternate)
- o Dupont - sulfuric acid plant (alternate)

Phoenix Steel was eliminated because of reduced production levels and the nature of the emissions (fugitive sources and an unconfined baghouse discharge). Philadelphia Electric's Christian Street power station (oil) had no ports and was operating at reduced capacity.

Pretest surveys of the sources on the list of potential test sites were conducted during July and August in preparation for the emission tests. The Dupont facility was considered inappropriate for testing after the survey for several reasons - lack of proper location for accurate measurements, reduced production, and distance from a receptor. Sun Oil's catalytic cracker was assigned alternate status after the pretest because BP's unit was larger and easier to test.

EMISSION POINT TESTING AND RESULTS

At the conclusion of the time period alloted for source testing, three of the selected sources had been tested - BP Oil, Harshaw Chemical, and Allied Chemical. When tested, the processes at each facility were operated at a level consistent with operations during the July/August study period. Four attempts were made to sample the Eddystone plant, but plant operating problems prevented a successful test. Particulate matter emission rates and concentrations were determined by EPA Method 5; NO_x data were collected with a chemiluminescent continuous analyzer generally as described in EPA Method 20; SO_x data were generated by using a modification to EPA Method 8; sulfate data were likewise generated from the modified Method 8 train, using the same sample train for particulate matter, sulfur oxides, and sulfates; and the particle size data were collected with a Pilat cascade impactor.

Table 2.2 summarizes the emission rate measurements for each of the test runs and the test series averages for selected parameters, while Table 2.3 highlights the results of the particle size sampling. Figures 2.1 through 2.8 present the particle size data graphically and percent within any range can be estimated from the graphs, i.e., from 2.5 microns to 10.0 microns. All runs at each source were plotted to provide some sense of the variance observed. The complete set of results for the particle size and particulate matter/SO_2/SO_4 testing are included in Appendix B.

The particle size data presented for Harshaw Chemical are believed to be representative of the stack emission distribution from this source. However, the particle size data from BP and Allied need to be qualified. The data from BP are probably not representative because a low temperature collection medium was used. The data from Allied are probably representative of the acid mist size distribution in the duct sampled. The test location, however, was in the breeching to the stack and company data and on-site

TABLE 2.2

POINT SOURCE TESTING SUMMARY

Source	Stack Gas Flow Rate m^3/min	Stack Gas Flow Rate DNm^3/min	Stack Temp. °C	Emissions: Particulate mg/Nm^3	Particulate Kg/hr	Sulfate mg/Nm^3	Sulfate Kg/hr	SO_2 ppm	SO_2 Kg/hr	NO_x ppm	NO_x Kg/hr
Harshaw Chemical Sb Roaster											
Run # 1	524	488	31.3	19.2	0.56	1.38	0.04	7	0.57	6	0.22
2	511	481	28.0	44.2	1.28	0	0	0	0.03	3	0.11
3	547	501	31.8	42.4	1.27	0	0	1	0.11	2	0.08
Average	527	490		35.3	1.04	0.46	0.01	3	0.24	4	0.14
										NO < 2.0 ppm	
Allied Chemical Acid Plant[a]											
Run # 1	2291	1910	85.4	170	19.5	8.27	0.95	523	159.7	11	3.4
2	2274	1893	86.6	588	66.7	19.46	2.21	479	144.2	13	3.9
3	2255	1894	82.3	199	22.6	4.57	0.52	475	143.6	14	4.2
Average	2273	1899		319	36.3	10.77	1.23	492	149.3	13	3.8
BP Oil Catalytic Cracker											
Run # 1	7700	3932	246.5	94.2	22.2	0.83	0.20	200	125.8	85	53.7
2	7694	3920	251.8	81.1	19.1	0.40	0.09	207	129.8	81	50.9
3	7742	3945	252.5	125.0	29.6	0.33	0.08	208	131.2	77	48.7
Average	7712	3932		100.1	23.6	0.52	0.12	205	128.9	81	51.1

[a] Particulate and sulfate emissions representative of breeching where tests were conducted but not representative of stack exit since significant amounts of acid are collected in the stack drain. Sulfate emissions actually represent SO_3 and particulate represent H_2SO_4. Total sulfate emissions can be obtained by summing the two values.

TABLE 2.3

PARTICLE SIZE TESTING SUMMARY

Source	Run #	Distribution (percent)[a]		
		< 2.5 μ	2.5 - 10 μ	> 10 μ
Harshaw	1	48.8	45.6	5.6
	2	47.5	46.5	6.0
	3	52.2	43.6	4.2
		49.5	45.2	5.3
BP[b]	1	52	48	0
	2	0	78.3	21.7
		NA	NA	NA
Allied[c]	1	54.1	25.8	20.1
	2	57.0	22.6	20.4
	3	48.1	29.4	22.5
		53.1	25.9	21.0

a Distribution ranges are approximate because actual ranges varied from run to run. See graphs and appendix data for exact sizes.

b Use of coated substrates is believed to have caused invalid results. Data presented for information only. Lower size cutoff is 2.0 microns instead of 2.5.

c Represent particle sizes in breeching but not at stack exit since significant amounts of acid are collected in stack drain.

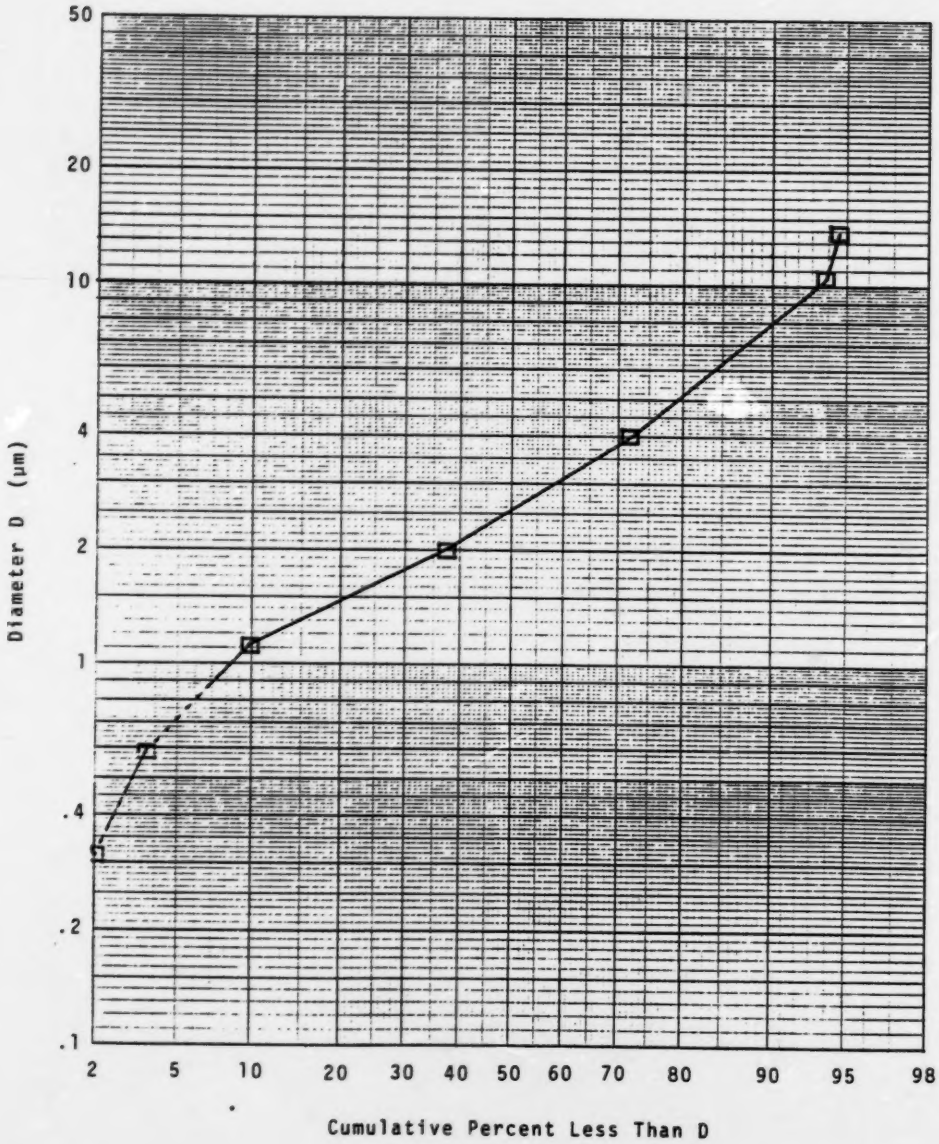

Figure 2.1 Harshaw Chemical (Antimony Roaster) Particle Size Results - Test 1

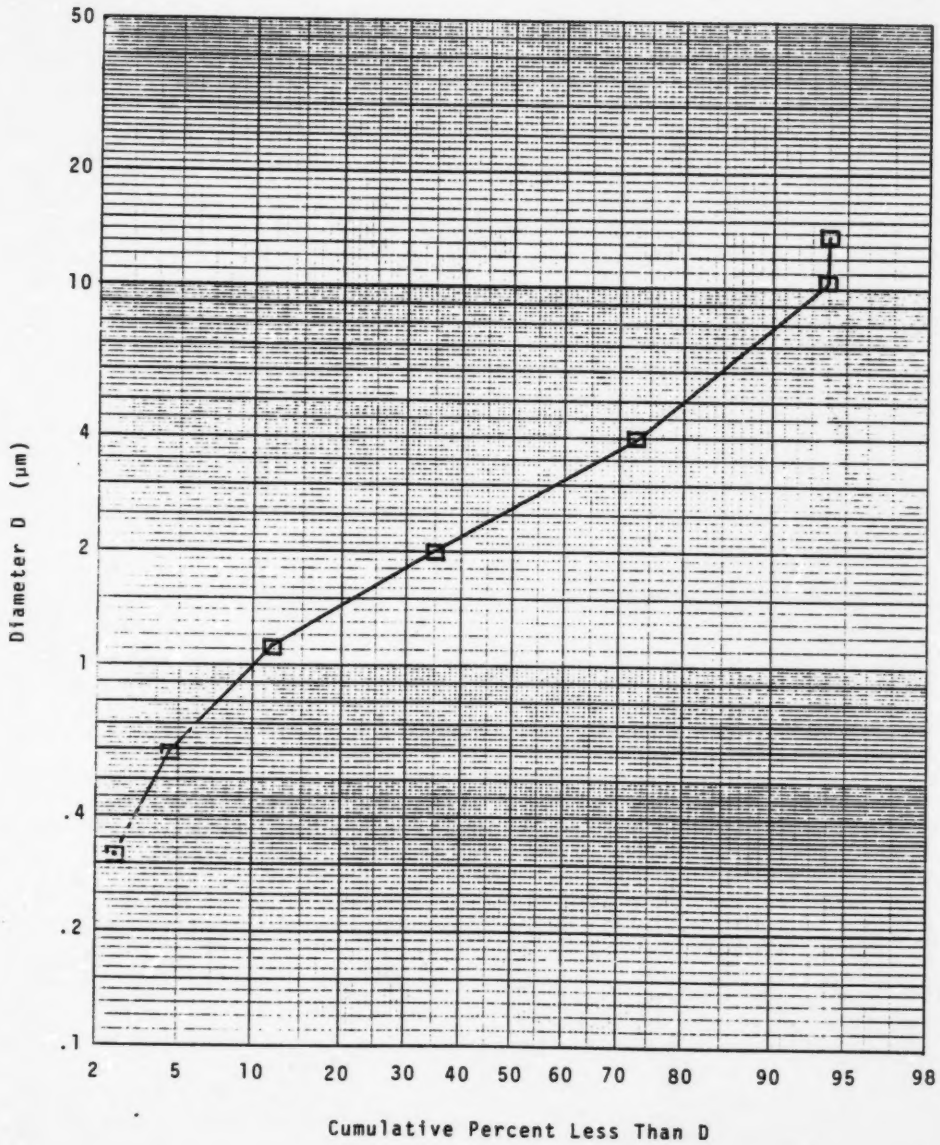

Figure 2.2 Harshaw Chemical (Antimony Roaster) Particle Size Results - Test 2

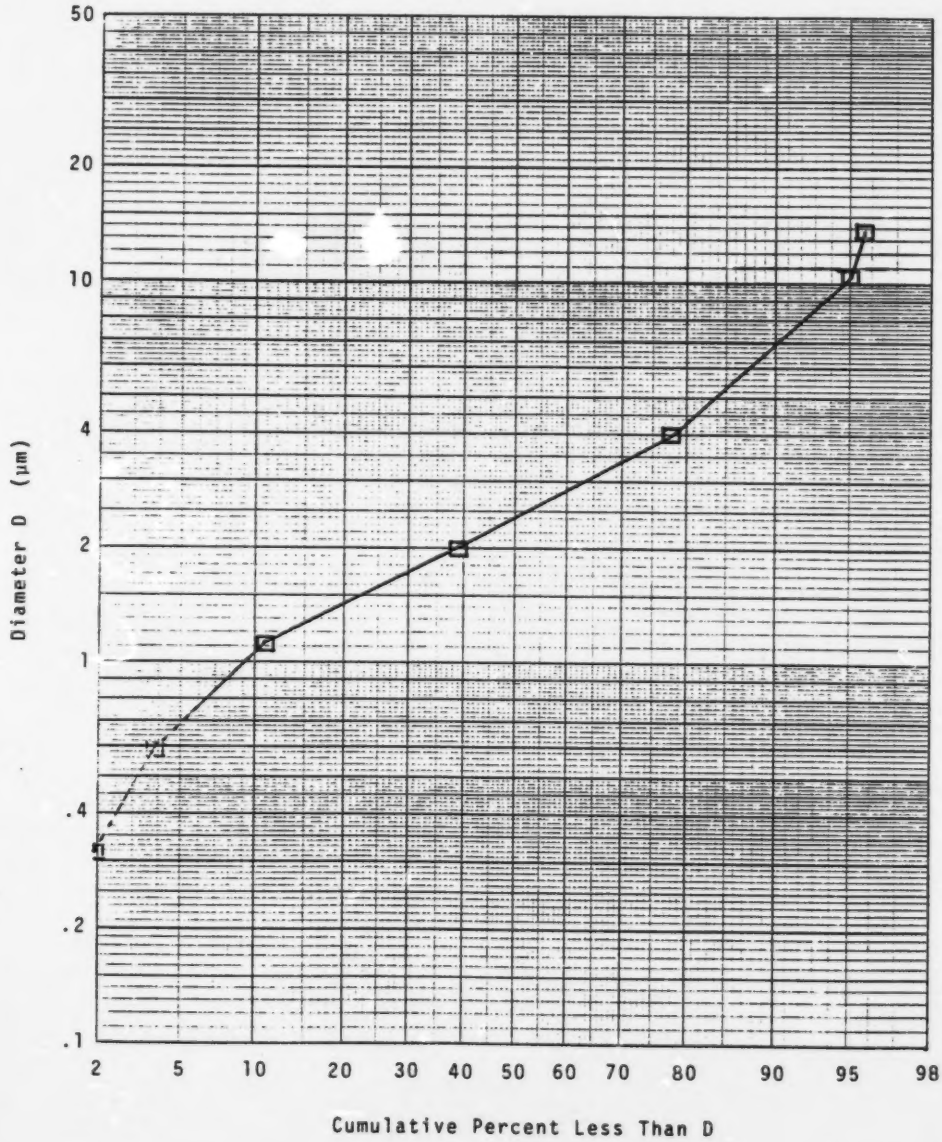

Figure 2.3 Harshaw Chemical (Antimony Roaster) Particle Size Results - Test 3

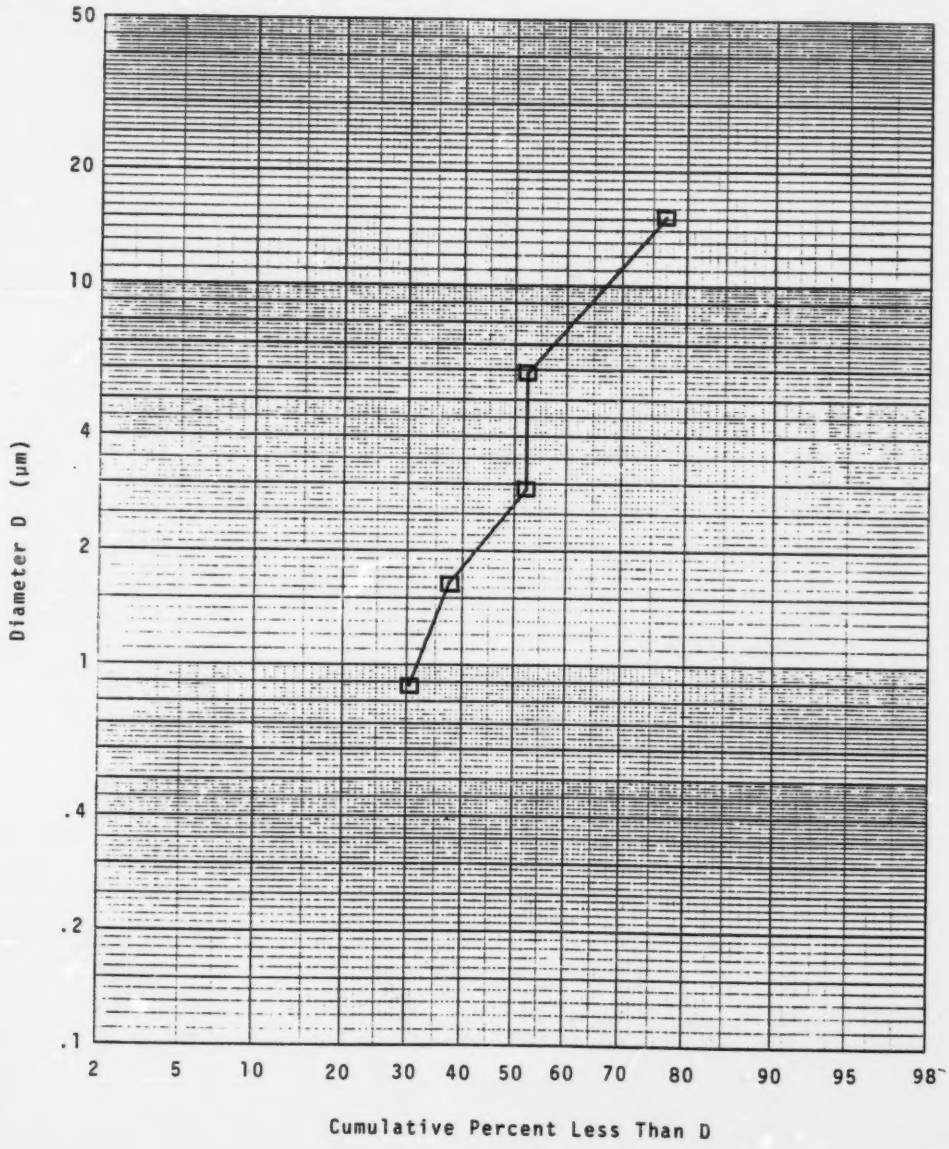

Figure 2.4 BP Oil (Catalytic Cracker) Particle Size Results - Test 1

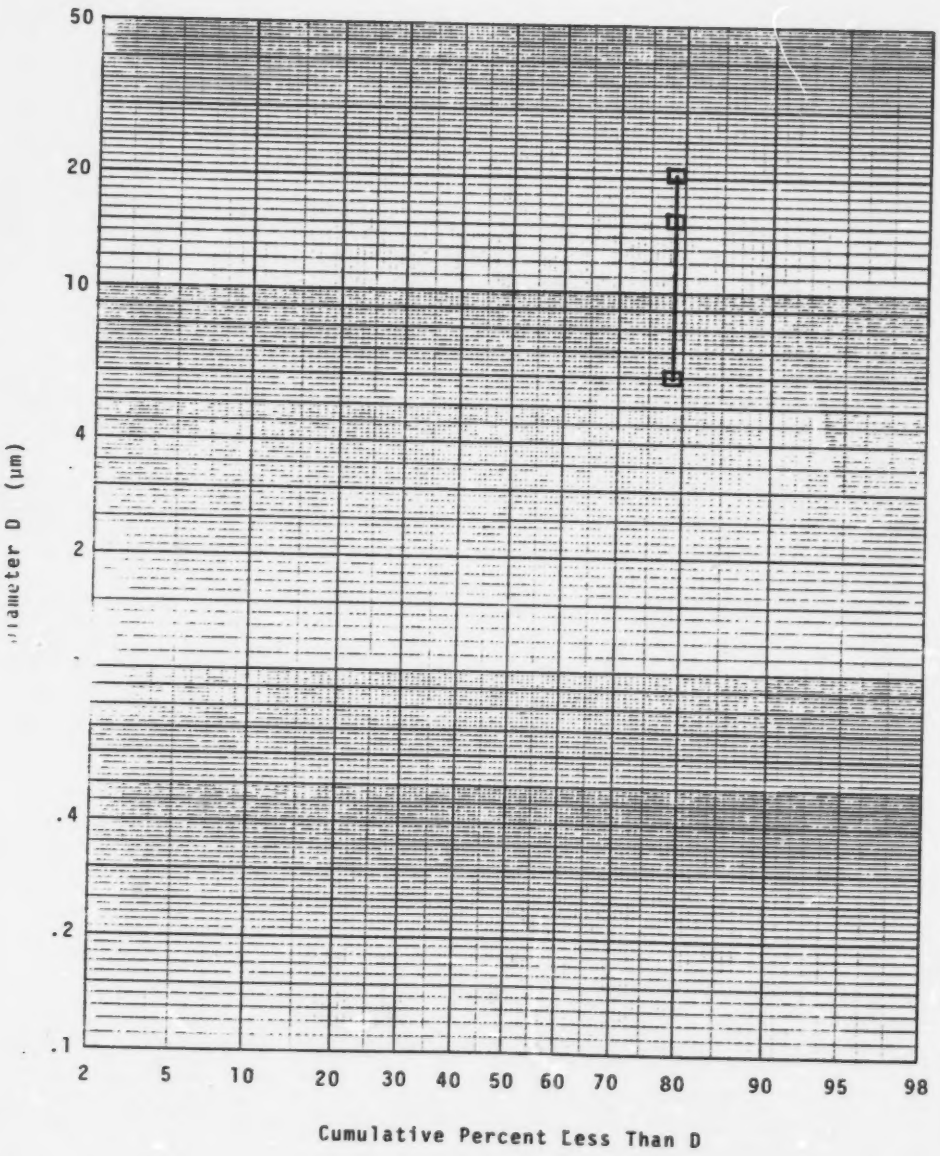

Figure 2.5 BP Oil (Catalytic Cracker) Particle Size Results - Test 2

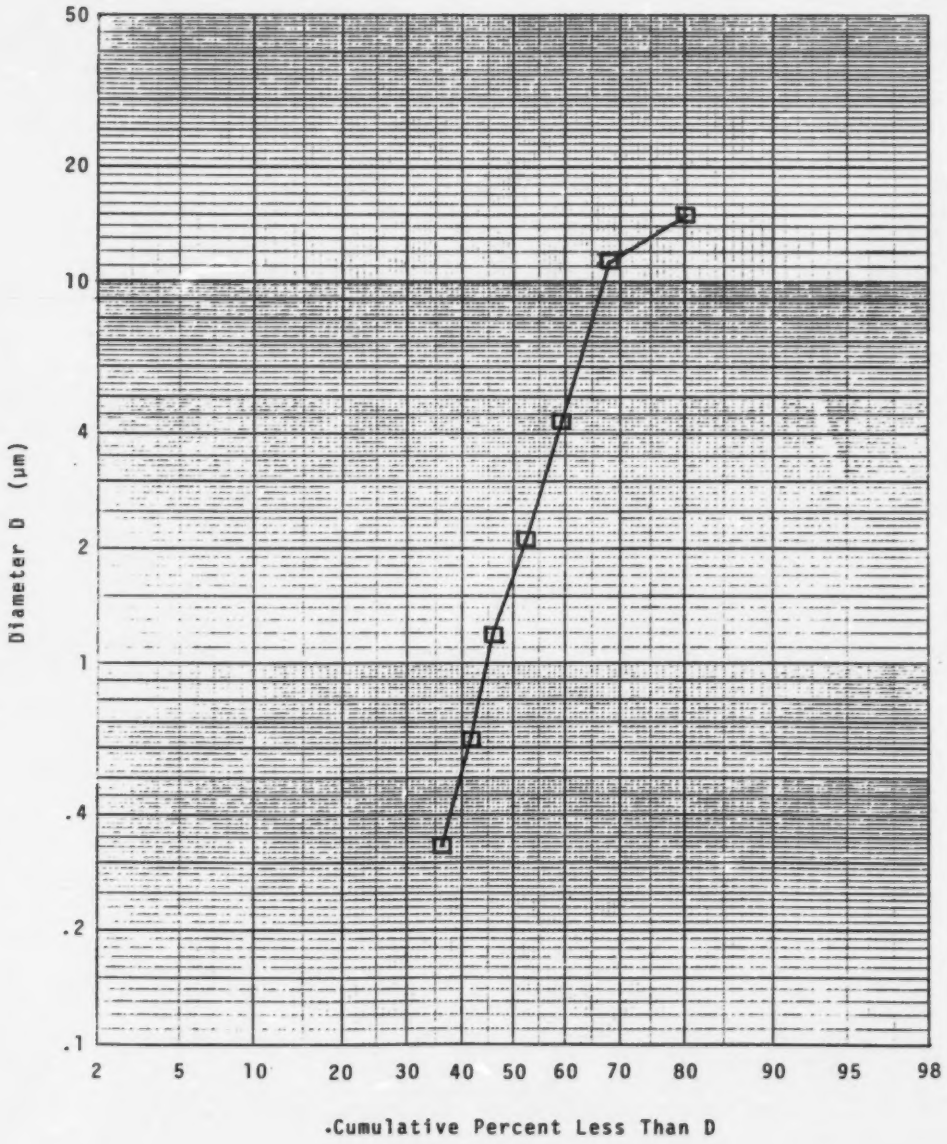

Figure 2.6 Allied Chemical (Sulfuric Acid Plant) Particle Size Results - Test 1

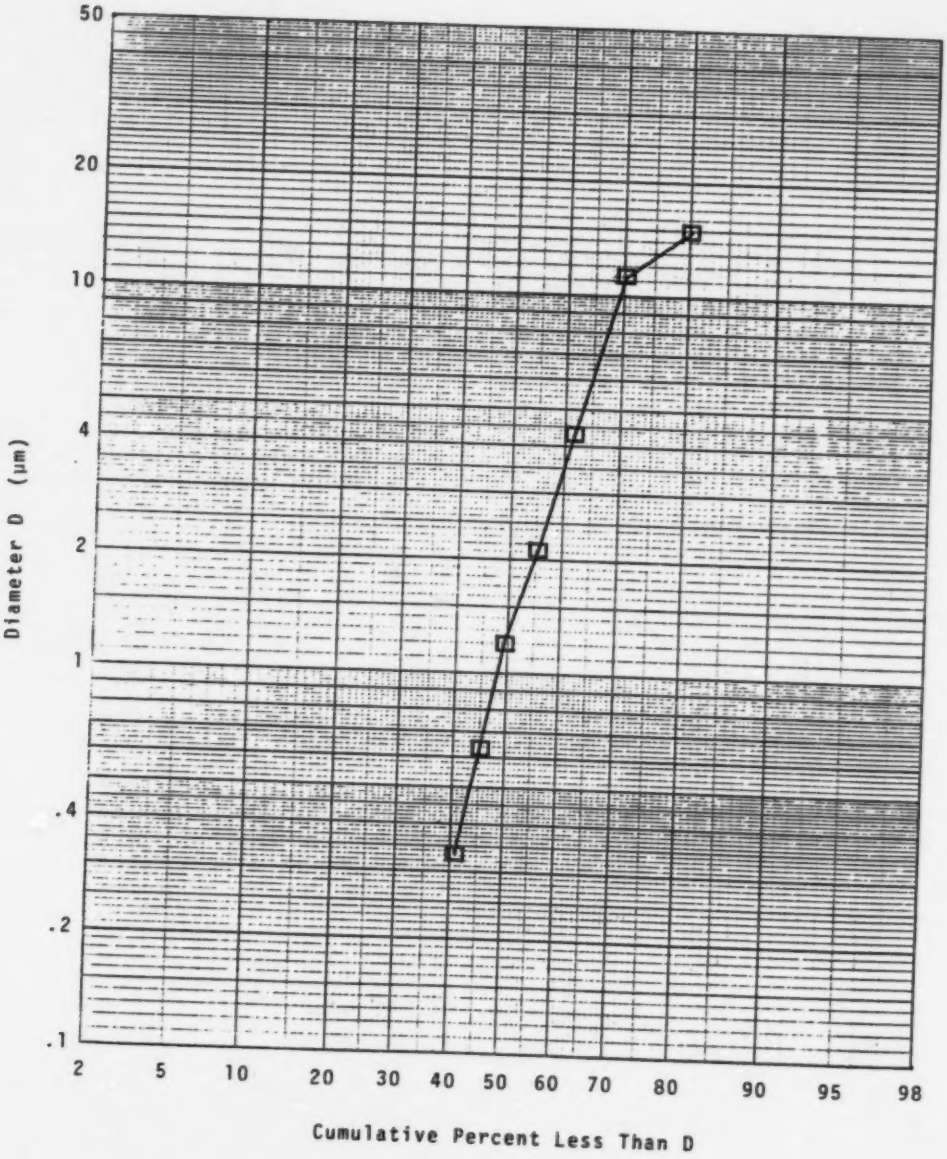

Figure 2.7 Allied Chemical (Sulfuric Acid Plant) Particle Size Results - Test 2

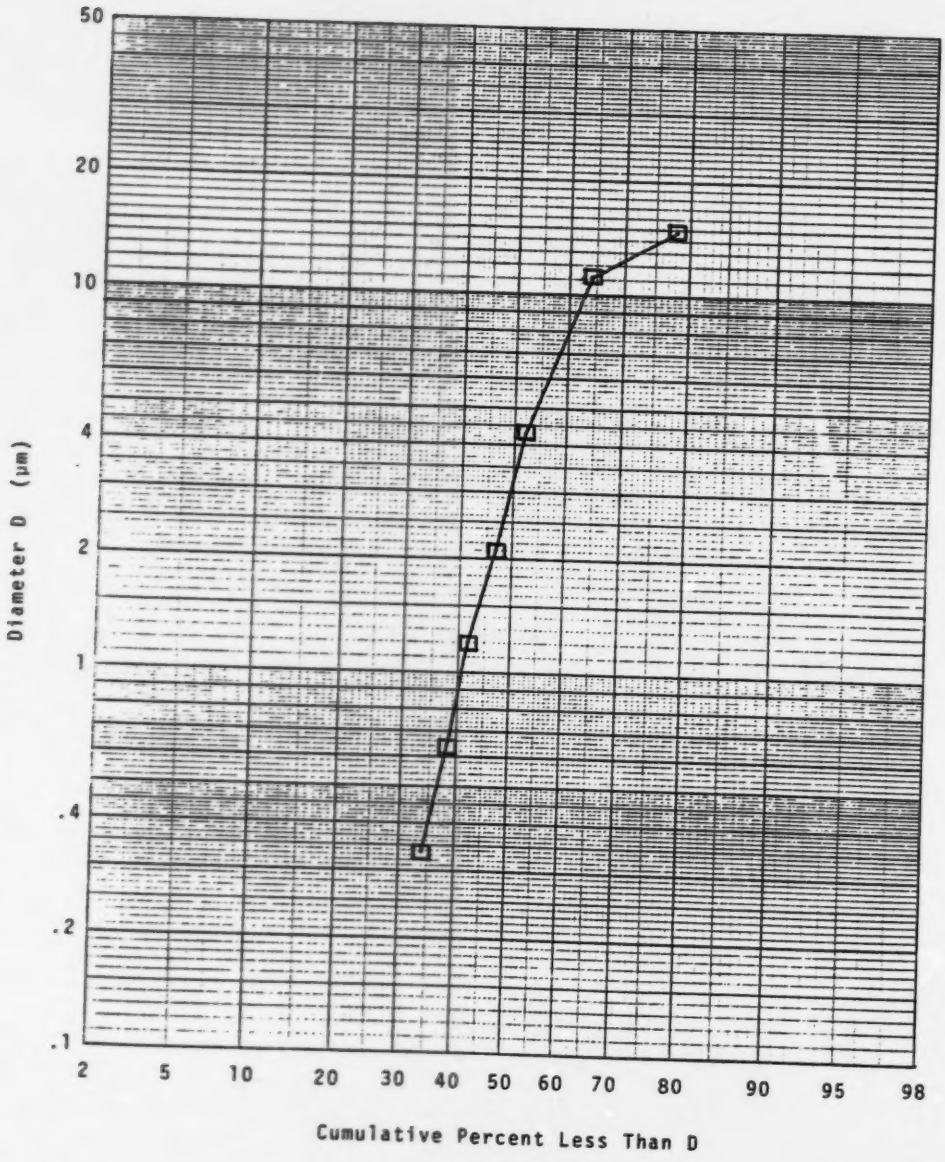

Figure 2.8 Allied Chemical (Sulfuric Acid Plant) Particle Size Results - Test 3

observation indicate that the particle sizes in the stack discharge are different from those in the breeching since significant quantities of acid are collected from the stack drain. Because of these problems, the BP particle size and the Allied particle size and total mass results for particulates and sulfate are not representative and should not be used for the PEM-2 model validation study.

SELECTION OF PAVED ROADS FOR SAMPLING

After the decision was made to conduct paved road sampling and the field testing program funds were divided between the stack tests and the paved road sampling, candidate roadways were identified for analysis. Because the purpose of the study is to develop emissions input for a model validation program, the most important selection criterion was location with respect to the ambient monitoring sites. In general, the closer the street to the sampler, the greater its impact. The second criterion was to obtain data for the street categories defined in the MRI publication (Reference 1) used to develop paved road emission factors for particulates. These categories were defined by the amount of annual average daily traffic (AADT), the number of lanes, and finally the roadway width:

Road Type	AADT	No. of Lanes
Freeways/Expressways	> 10,000	4 or more
Major streets/Highways	> 10,000	4 or more
Collector Streets	500-10,000	2 (road width 32 ft or more)
Local Streets	< 500	2 (road width less than 32 ft)

These road categories were defined by MRI for use in emission inventories, and default silt loading values were provided to be used in cases that site-specific samples could not be collected. Around each monitoring site, roadways in as many of these categories as possible were ultimately selected as candidates for testing to provide data which could also be used to inventory emissions in other portions of the study area.

First, a listing of the roadways around each monitoring site was prepared. ES then obtained AADT volumes and road configuration information from DVRPC for the roads. Based on these data, ES selected 17 candidate roads as identified in Table 2.4. Where possible, a range of AADT was selected for a given road type to consider the effects of varying traffic volumes. No local (or residential) streets were specifically identified near the monitoring sites. Therefore, it was decided to have the sampling team select a half dozen representative residential streets in the vicinity of the monitors for collecting silt samples. Residential type streets are not typically included in DVRPC's network and were thus included in the inventory as residual VMT on a grid basis.

The list of candidate roads for sampling was provided to the field testing team. The test team then selected the exact sampling location while in the field based on their inspection of the roadway and the monitoring site.

TABLE 2.4

CANDIDATE ROADWAYS FOR SILT LOAD SAMPLING[a]

Monitoring Site No.	Street Name/Likely Road Type	AADT	Road Characteristics	Reason for Selection
5	Broad Street/Major	33,600	two lanes by direction	location
	Lombard Street/Collector	7,400		location
7	I-95/Freeway	82,000	four lanes by direction (elevated)	location,type
	Allegheny/Major	8,000	two lanes by direction	location,type
	Richmond Street/Collector	12,000	one lane by direction (undivided)	location,type
8	City Avenue/Major	41,200	two lanes by direction (no median)	location
	Belmont Avenue/Major	12,400	two lanes by direction (median)	location
	Ford Road/Collector	7,100	one lane by direction	location,type
12	Grant/Major	26,000	two lanes by direction	location
	Ashton/Collector	8,400	one lane by direction	location,type
	Roosevelt Boulevard/Major	58,000	six lanes by direction	type
28	Haddon Avenue/Major	14,000	two lanes by direction	location
	Ferry Avenue/Collector	10,000	one lane by direction	type,location
	I-676/Freeway (new)	30,000	three lanes by direction	type,location
	Crescent (U.S. 130)/Major	68,000		location
34	Route 551/Collector (rural)	5,200	one lane by direction	location,type
	I-295/Freeway (heavy truck)	38,000	two lanes by direction	type

[a] The list does not cover residential streets. A half dozen of these were to be selected by the test team while in the field.

The paved road sampling and results are discussed in the following part of Section 2.

PAVED ROAD SAMPLING AND RESULTS

As previously mentioned, specific roads near the monitors were selected for sampling with local roads to be chosen by the sampling team as well as the exact location of the roadway segment to be sampled. To the extent possible, typical roads from several categories were chosen for sampling. The categories are those used for classification by many transportation agencies for traffic planning. The selection of a specific segment was largely an educated guess, consisting of subjective evaluations of the representativeness of various locations, inclusion of curb/gutter portions, definition of travel lane boundaries, and the safety with which the sampling could be conducted. As the sampling progressed, it became apparent that there would not be sufficient time or money to sample all types of roads near all the monitors in the study area, so the sampling effort was focused on roads near the Philadelphia County sites. The rural New Jersey site was not considered as significant to the model validation effort as the others and the Camden site was thought to be similar to some of the roads sampled in Philadelphia.

The sampling and analytical methodology was taken from the MRI report previously referenced. The descriptions of the techniques involved were, of necessity, augmented by phone conversations with previous "investigators" and were also modified as necessary. The basic procedures are outlined below.

Samples of deposited solid material are collected by vacuuming a known area of a given roadway or portion thereof. A conventional household vacuum cleaner of the upright broom type was used to collect samples in tared disposable paper bags. The bags were numbered and tared in the field and were weighed in the field immediately following sample collection to provide the sampling team with assurance of collecting sufficient sample for subsequent analysis. A section of the travel lane(s) being sampled was closed to traffic and a rectangular portion marked off with colored string. The rectangle was vacuumed twice - once parallel to each side of the rectangle. Depending on the road configuration, other travel lanes in the same direction were then vacuumed at the same location. The process was repeated for the opposite travel direction. Data recorded included sample area, pre- and post-weights, road identification, ADT (either known or estimated) and other information.

Collected samples were placed in plastic bags, sealed, and labeled. Upon return to the lab, a dry sieve analysis was performed. The bag was again weighed and the collected dust and dirt emptied into a set of standard sieve screens with tared sieve pans. The weight of each of the various size fractions was determined as well as the amount of collected material that adhered to the bag walls. Bag losses were assumed to be less than 200 mesh and were added to the mass of <200 mesh material in the sieved sample.

At each of the sites, one or more local roads were selected to provide data on all four road categories. Again, subjective evaluations of the nature of the area and road conditions were used to select the roads. The ADT

numbers in the table for these local roads were estimated during sampling by traffic counts by the sampling crew and are "order of magnitude" values at best.

Table 2.5 summarizes the results of the road sampling. The data show the same general trends as have been reported by others and the magnitudes are also similar. MRI-reported values are shown in Table 2.7 by road category.

Visual comparisons of the sampled roads with other roads of the same type in the Philadelphia area suggest that the sampled roads represent a cross section of the network. The following list categorizes the results of the road sampling as to the relationship of the sampled roads to the entire network:

Category	Road Sampled	Description
Major Streets/ Highways	Broad Street	Typical
	Allegheny Avenue	Atypical, Dirty
	City Avenue	Atypical, Clean
	Roosevelt Boulevard	Atypical, Clean
	Belmont Avenue	Typical
	Grant Avenue	Typical
Collectors	Lombard Street	Atypical, Dirty
	Richmond Street	Typical
	Ford Road	Typical
	Ashton Avenue	Typical
Locals	Edgemont Avenue	Atypical, Dirty
	Sorrento Avenue	Atypical, Dirty
	Old Newton Road	Typical
	Greymount/Wilbur Street	Atypical, Clean

In order to represent the entire Philadelphia network with a single silt loading value for each road category, the sampled roads in each category which were typical of the network were averaged to obtain a single silt loading value. The resulting silt load quantities are shown in Table 2.6.

The silt load values reported in Reference 1 are compared to the average values obtained from the ES sampling program in Table 2.7. The differences shown are expected since a great deal of variance was found by MRI in their sampling program, especially for the collector category. The amount of mud and dirt tracking is an important factor in silt loading especially for local roads. Mud and dirt tracking was not typically observed on local (residential) roads in Philadelphia. Street surface type and condition, public works practices, and season of the year also affect roadway silt loadings. Much of the MRI program was conducted in the winter and spring when silt loading would be expected to be higher. Because these factors can have such a significant impact on silt loading, it is believed that the Philadelphia silt loading values in Table 2.7, though different from those reported by MRI for other areas, are representative of actual conditions in

TABLE 2.5

PAVED ROAD SAMPLING SUMMARY

Street Name	No. of Lanes	Monitor Ref.	Loading (g/m^2)		% Silt
			Total	Silt	
Broad Street (major)	4	5	1.08	.205	19.0
Lombard Avenue (collector)	2	5	1.18	.165	14.0
Allegheny Avenue (major)	2	7	2.31	.120	5.2
Richmond Street (collector)	2	7	0.53	.111	21.0
Edgemont Avenue (local)	1	7	14.5	2.03	14.0
City Avenue (major)	4	8	0.24	.028	11.5
Belmont Avenue (major)	2	8	0.51	.130	25.4
Ford Road (collector)	2	8	1.01	.082	8.1
Sorrento Avenue (local)	1	8	10.6	.657	6.2
Grant Avenue (major)	4	12	1.36	.113	8.3
Ashton Road (collector)	2	12	0.81	.062	7.6
Roosevelt Boulevard[a] (major)	12	12	0.54	.030	5.5
Old Newton Road (local)	2	12	0.74	.061	8.3
Greymount/Wilbur Street (local)	2	12	0.55	.021	3.8

[a] Does not include left turn lanes.

TABLE 2.6

AVERAGE SILT LOAD FOR TYPICAL PHILADELPHIA ROADS BY ROAD CATEGORY

Road Category	Road Sampled	Silt Load (g/m^2)
Freeways/Expressways	None	NA
Major Streets/Highways	Broad Street	0.205
	Belmont Avenue	0.130
	Grant Avenue	0.113
	Average	0.149
Collector Streets	Richmond Street	0.111
	Ford Road	0.082
	Ashton Avenue	0.062
	Average	0.085
Local Streets	Old Newton Road	0.061

TABLE 2.7

COMPARISON OF MRI-REPORTED AND PHILADELPHIA SILT LOAD VALUES

Road Category	Silt Load (g/m^2)	
	MRI-Reported	Philadelphia[a]
Freeways/Expressways	0.022	NA
Major Streets/Highways	0.36	0.149
Collector Streets	0.92	0.085
Local Streets	1.41	0.061

[a] Represents average of typical roads in each category.

Philadelphia during July and August of 1982. The MRI-reported value for freeways/expressways was used for estimating emissions since this road category was not sampled in Philadelphia.

MONITORING SITE EVALUATION

The evaluation of the monitoring sites with respect to local source (microscale) influences and other factors is important for model validation. Local sources such as roadways and other fugitive sources are expected to be the most significant contributors to measured concentrations but the exact location of these sources is not input to the model. Therefore, some information concerning local source influences can be extremely helpful in interpreting model results. Any data available from the receptor model study conducted for monitoring sites 12, 28, and 34 should also be used to assist in evaluating model results along with the ambient concentration data collected. In addition to the source location problem, the model validation effort is complicated by the need to model daily and even hourly emission rates. The validation of short-term models is very difficult because real-time emissions and meteorological data are needed. According to the EPA guideline on dispersion modeling (Reference 2), uncertainties in the ability to precisely estimate the concentration at an exact location for a specific increment of time make attempts to validate a short-term model questionable. Although ES has developed hourly emission estimates for this study, it would be incorrect to assume that they represent real-time emission rates.

During the time that ES personnel were in the field collecting paved road samples, the monitoring sites to be used in the model validation effort were examined. Because no New Jersey roads were sampled, ES did not visit the two monitoring sites in that state. However, while traveling to conduct the source tests, ES passed close to monitor no. 34 (Clarksboro) and observed the area near the site. The following paragraphs summarize the information obtained during the monitoring site visits.

Site No. 5 - Community Health Services Building

The monitors at this site were located on top of a three-story building (36 feet above street level) and were shielded to the south by an eight-foot-high building extension. Due to their positioning, the monitors were probably not collecting much street-related particulate matter and may not have been collecting a representative sample at the three-story level due to the building obstruction. There are a number of nearby oil-burning boilers which may impact the monitors differently than at street level where TEM model predictions are made. As a result of these factors, model predictions may differ substantially from measured values.

Site No. 7 - Fireboat Station

Of the sites visited, this site is the most impacted by fugitive dust. There is one truck terminal adjacent to the monitoring site and others along the paved road (Allegheny Avenue) that is just west of the site. A relatively high volume of truck traffic was observed on the roadway. The road surface

contained substantial amounts of dust (see results of paved road sampling in Section 2). There was also some construction underway southwest of the monitor and adjacent to a non-operating grain loading facility. Significant amounts of dust were being generated from the construction during the site visit. Although construction and paved road emsisions are accounted for in the inventory, these categories are treated as area sources and assigned to grid cells that are 2.5 kilometers on a side. Therefore, the exact location of the roadway and construction emissions is not input to the model which is likely to underpredict measured concentrations. Under certain meteorological conditions, the Franklin Smelter (copper) may impact the monitoring site. The plant is located 1.16 kilometers northeast of the site.

Site No. 8 - Water Treatment Plant

This site is located on the western edge of Philadelphia County next to a water treatment plant. There are only two relatively insignificant point sources nearby. A county maintenance yard is not far from the site and is likely to have some impact on the monitors. The yard has unpaved roads and aggregate storage piles that contribute most of the particulate emissions. The paved roads surrounding the monitoring site also have a microscale influence. The impact of these sources is not expected to be overwhelming, however, and model predictions are likely to be closer to measurements at this site.

Site No. 12 - Northeast Airport

The monitoring site is located on the south side of the airport property near an area used for plane parking. The airport is completely paved and only used by civil aircraft. Airport operations are not expected to have a significant impact on the monitors. Both a barbeque house and an incinerator at the airport firehouse are located within 100 meters of the monitors and could have a significant impact on measured concentrations when in use. A number of roads in the vicinity with relatively high traffic volumes are likely to have a "suburban background" level of impact on the monitors. Several small point sources are located within about 1 kilometer of the monitoring site but the only one that has the potential for significant impact appears to be the Morrissey concrete batching plant which is located about 0.62 kilometers southwest of the monitoring site. This facility, including an estimate of fugitive emissions, is accounted for in the inventory but the fugitive emissions are treated as an area source with 0.2 kilometer sides. Therefore, the exact location of the emissions is not input to the model. No other microscale source influences were observed at this site.

Site No. 28 - Institute of Medical Research

This site was not visited by ES personnel. It is located in a suburban area of Camden and thus is expected to be impacted significantly by paved road emissions. No point sources near the monitoring site that would have a significant impact were included in the inventory provided by New Jersey DEP.

Site No. 34 - Shady Lane Home

Although this site was not visited by ES, the area around the monitor was observed. No sources that would have a microscale impact on the site were detected. The monitoring site could be described as a rural background site in the eastern U.S. However, there are a number of large point sources that are close enough to have some impact on the monitors.

REFERENCES

1. Paved Road Particulate Emissions, Draft Category Report, prepared for U.S. Environmental Protection Agency, Industrial Environmental Research Laboratory, Research Triangle Park, North Carolina, by Midwest Research Institute, Kansas City, Missouri, April 27, 1982.

2. Guideline on Air Quality Models, OAQPS Guideline Series, EPA-450/2-78-027, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, August 1978.

SECTION 3

ANNUALIZED POINT AND INDUSTRIAL PROCESS FUGITIVE SOURCE INVENTORY

INTRODUCTION

The basic approach used in developing the required model inputs consisted of applying temporal and pollutant factors to an annualized inventory of criteria pollutants. This procedure was employed for two reasons. First, computer software was already available since the same approach was used in generating the Urban Airshed photochemical oxidant model input for Philadelphia. Second, the only sources of detailed emission inventory data are state and local regulatory agencies which maintain annualized data bases. Thus, the use of this procedure was essentially dictated by the existence of needed computer programs and information source constraints.

This section first discusses the point source emission inventories obtained from the regulatory agencies. Next, the major/minor point source division is described. Such a division is necessary because modeling costs limit the number of sources that can be considered individually. Point sources of lesser significance can be aggregated within grid cells in which they are located and treated as area sources. Finally, this section identifies the methods used to compile an annualized industrial process fugitive particulate emission inventory.

POINT SOURCE INVENTORIES OBTAINED FROM REGULATORY AGENCIES

In August 1982, ES contacted each of the four regulatory agencies in the Philadelphia AQCR and requested a copy of their most recent point source masterfile for use in this study. The four regulatory agencies are the Philadelphia Air Management Services (AMS), the Pennsylvania Department of Environmental Resources (DER), the New Jersey Department of Environmental Protection (DEP), and the Delaware Department for Natural Resources and Environmental Control (DNREC). Each agency supplied a copy of their most up-to-date masterfile on magnetic tape. The following subsections discuss the data obtained from each agency by geographic area.

Pennsylvania -- Philadelphia County

AMS provided 1980/1981 emission data in National Emission Data System (NEDS) format for Philadelphia County. The inventory contains all permitted plants with emissions greater than one ton per year. The year of record of the data in the inventory varied since a few of the larger facilities had been updated for 1981 as part of the annual inventory update. Operating data were

deleted in the file for a number of facilities that had requested that this information be kept confidential. ES converted the NEDS data to EIS/P&R using a standard conversion program.

A 1978 version of the inventory was used in preparing a preliminary set of emission inputs to the Urban Airshed model. A review of the 1978 data using an EIS/P&R edit program showed no missing data and consistency between data fields. For the final Airshed model input, a 1979 inventory was obtained and compared to the 1978 information. Differences were discussed with AMS personnel and found to be a result of different operating levels. For the Southeast Pennsylvania Air Basin study, NEDS data for 1976 were obtained from AMS and analyzed to identify missing or anomalous data. As a result of these activities, ES has become very familiar with the Philadelphia County inventory and considers it to be complete and well-maintained. A substantial amount of industrial process fugitive emissions are included in the data base.

Pennsylvania -- Bucks, Chester, Delaware, and Montgomery Counties

DER supplied 1980 emission data in NEDS format for Bucks, Chester, Delaware, and Montgomery Counties to EPA which in turn provided the data to ES. The inventory is updated annually and contains data for all plants with uncontrolled emissions in excess of about 25 tons per year. DER maintains data in the Pennsylvania Emission Data System (PEDS) and uses a computer program to convert to NEDS. ES converted the NEDS data to EIS/P&R format.

A 1976 version of the inventory was used to prepare preliminary emission inputs for the Urban Airshed model and to model the Southeast Pennsylvania Air Basin. A review of the 1976 data indicated that the conversion from PEDS to NEDS had not been accurately performed. ES made manual updates to the EIS/P&R masterfile to ensure consistency with PEDS. When ES obtained the 1978 inventory to generate the final Airshed model input, the 1978 data were compared to the 1976 inventory. A number of discrepancies in volatile organic compound (VOC) emissions were discovered and discussed with DER personnel. DER suggested that the VOC emissions be modified to be consistent with emission data included in their 1982 ozone SIP revision.

A new PEDS to NEDS conversion program was used to generate the 1980 inventory used in this project. The program appears to be operating properly in that it produces NEDS data consistent with PEDS. Because DER has maintained data in PEDS for several years, the 1980 inventory obtained for this study is considered to be reasonably accurate for TSP and SO_x.

New Jersey -- Burlington, Camden, Gloucester, Mercer, and Salem Counties

DEP provided an emission inventory in EIS/P&R format for Burlington, Camden, Gloucester, Mercer, and Salem Counties that generally reflected 1980 conditions. The EIS/P&R masterfile was created using a conversion program and data from DEP's Air Pollution Emission Data System (APEDS). APEDS differs radically from EIS/P&R and NEDS making the conversion very difficult to complete properly. Data in APEDS are updated for a given facility when its operating permit is renewed which occurs every five years. Interim updates

may be made by the inspector in the field office if deemed necessary. Because this technique is used to maintain APEDS, the data do not reflect a single year of record.

At the time the preliminary inputs to the Airshed model were being developed, too little usable information was contained in APEDS to warrant its use. A NEDS inventory representing 1974 or 1975 conditions, after some updating to 1979, was utilized. DEP undertook a large program to update and add information to APEDS. The revised APEDS inventory which reflected 1979/1980 conditions was employed in generating the final Airshed model input. After the revised APEDS inventory was converted to EIS/P&R format, ES summarized and compared the data to DEP's list of major facilities and their emission rates. A number of discrepancies were found and it was decided that a trip to the DEP field offices was necessary to obtain accurate data. Because the data were to be used for photochemical oxidant modeling, only sources with VOC or nitrogen oxides (NO_x) emissions of 100 tons per year or more were updated for VOC and NO_x.

The version of the EIS/P&R masterfile obtained for this study is an improvement over earlier versions. Some problems with the conversion program have been resolved and additional updates have been made. A review of summary data generated from the masterfile identified eight plants that had questionable TSP emissions. Inventory data for these plants were discussed with DEP personnel and appropriate updates were made.

Delaware -- New Castle County

DNREC supplied a 1981 inventory in EIS/P&R format for New Castle County. DNREC includes all permitted sources on its EIS/P&R masterfile and annual updates are made.

A 1978 version of the inventory was used to prepare preliminary Airshed model input. A review of the 1978 data using an EIS/P&R edit program showed that the inventory was complete and consistent for data fields checked by the program. For the final Airshed model input a 1979 inventory was obtained and compared to the 1978 data base. Differences were discussed with DNREC personnel and found to be a result of changes in operating rates in nearly all cases. ES has made use of DNREC inventory data on a number of occasions in the past few years and has found it to be very well-maintained.

Summary of Point Source Emissions

After the necessary adjustments to the inventory for the New Jersey counties were made, the data base was summarized to provide information on annual TSP and SO_x emissions. A summary table was generated for each of the eleven counties and for the AQCR (Tables 3.1 through 3.12). Emissions data in these tables are identified for major categories both inside and outside the 42.5 by 42.5 kilometer inventory area. Tables 3.13 and 3.14 provide TSP and SO_x emissions, respectively, for the 50 largest emission points ranked in descending order of emissions.

TABLE 3.1

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
PHILADELPHIA COUNTY, PENNSYLVANIA

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	112	0	6,743	0
Non-Utility Boilers	1,261	0	10,551	0
Stationary Internal Combustion	54	0	128	0
Chemicals Manufacturing	45	0	24	0
Primary Metals Manufacturing	786	0	16	0
Mineral Products Manufacturing	223	0	51	0
Petroleum Refining	406	0	9,695	0
Incineration	1,211	0	542	0
Other	2,322	0	415	0
Total	6,420	0	28,165	0

TABLE 3.2

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
BUCKS COUNTY, PENNSYLVANIA

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	0	0	0
Non-Utility Boilers	0	49	0	402
Stationary Internal Combustion	0	45	0	127
Chemicals Manufacturing	2	60	0	13
Primary Metals Manufacturing	0	10,908	0	9,478
Mineral Products Manufacturing	0	1,770	0	31
Petroleum Refining	0	0	0	0
Incineration	0	0	0	0
Other	0	95	0	14
Total	2	12,927	0	10,065

TABLE 3.3

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
CHESTER COUNTY, PENNSYLVANIA

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	2,111	0	14,067
Non-Utility Boilers	0	138	0	712
Stationary Internal Combustion	0	0	0	0
Chemicals Manufacturing	0	0	0	0
Primary Metals Manufacturing	0	109	0	97
Mineral Products Manufacturing	0	1,125	0	349
Petroleum Refining	0	0	0	0
Incineration	0	0	0	0
Other	0	0	0	121
Total	0	3,483	0	15,346

TABLE 3.4

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
DELAWARE COUNTY, PENNSYLVANIA

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	4,512	0	30,248	0
Non-Utility Boilers	391	5	2,591	41
Stationary Internal Combustion	2	0	9	0
Chemicals Manufacturing	3	184	41	0
Primary Metals Manufacturing	0	0	0	0
Mineral Products Manufacturing	75	507	9	7
Petroleum Refining	937	0	19,569	0
Incineration	28	0	8	0
Other	381	0	33	1
Total	6,329	696	52,508	49

TABLE 3.5

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
MONTGOMERY COUNTY, PENNSYLVANIA

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	0	0	0
Non-Utility Boilers	149	122	532	2,051
Stationary Internal Combustion	0	0	0	0
Chemicals Manufacturing	6	1,271	0	0
Primary Metals Manufacturing	344	0	334	0
Mineral Products Manufacturing	3,251	1,998	32	209
Petroleum Refining	0	0	0	0
Incineration	0	39	0	29
Other	2	377	55	142
Total	3,752	3,807	953	2,431

TABLE 3.6

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
BURLINGTON COUNTY, NEW JERSEY

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	477	0	442
Non-Utility Boilers	56	165	345	609
Stationary Internal Combustion	0	460	0	529
Chemicals Manufacturing	12	843	3	24
Primary Metals Manufacturing	2	46	0	0
Mineral Products Manufacturing	23	214	0	96
Petroleum Refining	0	0	0	0
Incineration	4	7	0	0
Other	69	327	0	0
Total	166	2,539	348	1,700

TABLE 3.7

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
CAMDEN COUNTY, NEW JERSEY

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	4	0	6	0
Non-Utility Boilers	1,206	129	4,378	272
Stationary Internal Combustion	0	0	0	0
Chemicals Manufacturing	830	171	171	0
Primary Metals Manufacturing	5	4	0	64
Mineral Products Manufacturing	651	239	879	90
Petroleum Refining	0	0	0	0
Incineration	8	4	0	0
Other	508	5	165	0
Total	3,212	552	5,599	426

TABLE 3.8

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
GLOUCESTER COUNTY, NEW JERSEY

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	0	0	0
Non-Utility Boilers	1,528	101	5,682	274
Stationary Internal Combustion	8	0	38	0
Chemicals Manufacturing	287	70	2,331	0
Primary Metals Manufacturing	0	188	0	13
Mineral Products Manufacturing	16	90	0	37
Petroleum Refining	62	0	6,715	0
Incineration	184	3	410	0
Other	139	288	131	0
Total	2,224	740	15,307	324

TABLE 3.9

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
MERCER COUNTY, NEW JERSEY

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	462	0	15,811
Non-Utility Boilers	0	536	0	1,569
Stationary Internal Combustion	0	0	0	0
Chemicals Manufacturing	0	192	0	0
Primary Metals Manufacturing	0	12	0	0
Mineral Products Manufacturing	0	329	0	0
Petroleum Refining	0	0	0	0
Incineration	0	41	0	0
Other	0	1,809	0	1
Total	0	3,381	0	17,381

TABLE 3.10

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
SALEM COUNTY, NEW JERSEY

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	736	0	15,970
Non-Utility Boilers	1	311	3	1,697
Stationary Internal Combustion	0	22	0	123
Chemicals Manufacturing	0	714	0	998
Primary Metals Manufacturing	0	0	0	0
Mineral Products Manufacturing	0	223	0	2,073
Petroleum Refining	0	0	0	0
Incineration	0	75	0	13
Other	2	1,040	0	391
Total	3	3,121	3	21,265

TABLE 3.11

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
NEW CASTLE COUNTY, DELAWARE

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	0	944	0	49,181
Non-Utility Boilers	0	1,317	0	7,204
Stationary Internal Combustion	0	0	0	0
Chemicals Manufacturing	0	1,221	0	5,900
Primary Metals Manufacturing	0	865	0	0
Mineral Products Manufacturing	0	110	0	39
Petroleum Refining	0	3,373	0	25,798
Incineration	0	8	0	3
Other	0	44	0	6
Total	0	7,882	0	88,131

TABLE 3.12

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES
PHILADELPHIA AQCR

Category	Emissions (tons per year)			
	TSP		SO_x	
	Inside Grid	Outside Grid	Inside Grid	Outside Grid
Utility Boilers	4,628	4,730	36,997	95,471
Non-Utility Boilers	4,592	2,873	24,082	14,831
Stationary Internal Combustion	64	527	175	779
Chemicals Manufacturing	1,185	4,726	2,570	6,935
Primary Metals Manufacturing	1,137	12,132	350	9,652
Mineral Products Manufacturing	4,239	6,605	971	2,931
Petroleum Refining	1,405	3,373	35,979	25,798
Incineration	1,435	177	960	45
Other	3,423	3,985	799	676
Total	22,108	39,128	102,883	157,118

TABLE 3.13

TOP 50 EMISSION POINTS RANKED BY EMISSION INTENSITY FOR TSP

(EMISSIONS LISTED ARE FROM INDIVIDUAL STACKS)

RANK	POINT ID	ZONE	UTM/E	UTM/N	PLANT NAME	TONS/ YEAR	%	CUM. %
1	3923600045001402	18	472.2	4410.8	PHILADELPHIA ELECTRIC CO.EDDYSTONE	4386	7.2	7.2
2	3912000045002021	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	2283	3.7	10.9
3	0801800045001617	18	446.0	4381.7	GETTY OIL CO DELAWARE CITY 19706	1953	3.2	14.1
4	3916600045002301	18	454.8	4444.5	PHILADELPHIA ELECTRIC CO.CROMBY	1934	3.2	17.2
5	3912000045002013	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1732	2.8	20.1
6	3912000045002009	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1675	2.7	22.8
7	0801800045001618	18	446.0	4381.7	GETTY OIL CO DELAWARE CITY 19706	1420	2.3	25.1
8	3971600045206403	18	483.4	4417.1	TIDEWATER GRAIN, 26TH & PENROSE AVE	990	1.6	26.7
9	3971600045161408	18	491.6	4425.5	FARMERS EXPORT CO, 2870 E ALLEGHENY AVE	781	1.3	28.0
10	3912000045002014	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	769	1.3	29.3
11	3912000045002007	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	691	1.1	30.4
12	0801800045001904	18	462.0	4406.4	PHOENIX STEEL CORP,CLAYMONT 19703	605	1.0	31.4
13	3960000045005828	18	446.4	4454.5	FIRESTONE TIRE & RUBBER CPOTTSTOWN	555	.9	32.3
14	3106600045043005		510.7	4436.2	PUBLIC SERVICE ELECTRIC & GAS CO.	469	.8	33.1
15	3960000045002304	18	472.0	4438.1	GLASGOW INC. IVY ROCK	410	.7	33.7
16	0801800045000705	18	456.8	4399.3	DELMARVA POWER & LIGHT EDGEMOOR POWER PLANT MILM	398	.6	34.4
17	3960000045003432	18	479.6	4439.7	CORSON, G. & W. H. INC.	305	.5	34.9
18	3971600045157605	18	494.0	4427.0	PHILA COKE DIV, 4501 RICHMOND STREET	303	.5	35.4
19	3912000045002055	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	297	.5	35.9
20	3912000045002051	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	294	.5	36.3
21	3912000045002049	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	294	.5	36.8
22	3149000045009806		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	289	.5	37.3
23	3960000045003438	18	479.6	4439.7	CORSON, G. & W. H. INC.	282	.5	37.7
24	0801800045002101	18	462.8	4406.3	SUNOLIN CHEM CO,BOX F, CLAYMONT 19703	280	.5	38.2
25	3912000045002049	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	277	.5	38.7
26	3960000045005830	18	446.4	4454.5	FIRESTONE TIRE & RUBBER CPOTTSTOWN	276	.5	39.1
27	3912000045002054	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	258	.4	39.5
28	3912000045002046	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	258	.4	40.0
29	3912000045002044	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	258	.4	40.4
30	3912000045002045	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	254	.4	40.8
31	3960000045003431	18	479.6	4439.7	CORSON, G. & W. H. INC.	235	.4	41.2
32	3960000045003437	18	479.6	4439.7	CORSON, G. & W. H. INC.	235	.4	41.6
33	3916600045002001	18	454.7	4435.6	WARNER CO.	220	.4	42.0
34	3129800045047001	18	522.6	4447.4	PUBLIC SERVICE ELECTRIC AND GAS CO. MERCER STA.	220	.4	42.3
35	3129800045047002	18	522.6	4447.4	PUBLIC SERVICE ELECTRIC AND GAS CO. MERCER STA.	215	.4	42.7
36	3912000045002310	18	498.2	4455.4	BETTER MATERIALS CORP.	214	.3	43.0
37	0801800045003009	18	446.7	4383.7	DIAMOND SHAMROCK CHEM RIVER RD DEL CITY	213	.3	43.4
38	3912000045001308	18	480.6	4468.7	H & K QUARRY-BLOOMING GLEN	210	.3	43.7
39	3971600045950501	18	479.4	4432.1	N W INCINERATOR, DOMINO & UMBRIA	210	.3	44.1
40	3971600045950502	18	479.4	4432.1	N W INCINERATOR, DOMINO & UMBRIA	210	.3	44.4
41	3971600045156601	18	479.4	4431.5	CONTAINER CORP OF AMER, 5000 FLAT ROCK	203	.3	44.8
42	3971600045950401	18	488.4	4423.1	E C INCINERATOR, DELAWARE & SPR GRDN ST	202	.3	45.1
43	3912000045002008	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	200	.3	45.4
44	3912000045002006	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	200	.3	45.7
45	3923600045003001	18	465.3	4408.3	BP OIL, INC. REFINERY	196	.3	46.1
46	3923600045002827	18	458.3	4416.7	GENERAL CRUSHED STONE CO.GLEN MILLS	188	.3	46.4
47	3960000045005831	18	446.4	4454.5	FIRESTONE TIRE & RUBBER CPOTTSTOWN	183	.3	46.7
48	3106600045045742		514.6	4439.3	HOOKER CHEMICAL & PLASTICS CORP.	183	.3	47.0
49	3117600045022901		469.7	4404.1	ROLLINS ENVIRONMENTAL SERVICES, INC.	181	.3	47.3
50	3960000045002306	18	472.6	4438.1	GLASGOW INC. IVY ROCK	180	.3	47.6

TABLE 3.14

TOP 50 EMISSION POINTS RANKED BY EMISSION INTENSITY FOR SO_x

(EMISSIONS LISTED ARE FROM INDIVIDUAL STACKS)

RANK	POINT ID	ZONE	UTM/E	UTM/N	PLANT NAME	TONS/ YEAR	%	CUM. %
1	392360045001402	18	472.2	4410.8	PHILADELPHIA ELECTRIC CO.EDDYSTONE	21785	8.4	8.4
2	080180045000802	18	445.7	4382.9	DEL CITY POWER PLANT DP&L 800 KING ST WILM 19899	15806	6.1	14.5
3	080180045001618	18	446.0	4381.7	GETTY OIL CO DELAWARE CITY 19706	11794	4.5	19.0
4	080180045000801	18	445.7	4382.9	DEL CITY POWER PLANT DP&L 800 KING ST WILM 19899	10629	4.1	23.1
5	391660045002301	18	454.8	4444.5	PHILADELPHIA ELECTRIC CO.CROMBY	9850	3.8	26.9
6	080180045001617	18	446.0	4381.7	GETTY OIL CO DELAWARE CITY 19706	9636	3.7	30.6
7	080180045000803	18	445.7	4382.9	DEL CITY POWER PLANT DP&L 800 KING ST WILM 19899	8565	3.3	33.9
8	312980045047001	18	522.6	4447.4	PUBLIC SERVICE ELECTRIC AND GAS CO. MERCER STA.	7901	3.0	36.9
9	312980045047002	18	522.6	4447.4	PUBLIC SERVICE ELECTRIC AND GAS CO. MERCER STA.	7901	3.0	39.9
10	080180045000705	18	456.8	4399.3	DELMARVA POWER & LIGHT EDGEMOOR POWER PLANT WILM	7246	2.8	42.7
11	392360045002501	18	464.5	4406.8	SUN OIL CO. OF PENNSYLVANREFINERY	6483	2.5	45.2
12	3149000045009806		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	4389	1.7	46.9
13	080180045001619	18	446.0	4381.7	GETTY OIL CO DELAWARE CITY 19706	4368	1.7	48.6
14	391660045002302	18	454.8	4444.5	PHILADELPHIA ELECTRIC CO.CROMBY	4216	1.6	50.2
15	397160045150127	18	482.8	4418.1	ATLANTIC RICHFIELD CO, 3144 PASSYUNK AVE	3850	1.5	51.7
16	392360045003001	18	465.3	4408.3	BP OIL, INC. REFINERY	3772	1.5	53.2
17	3149000045009808		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	3657	1.4	54.6
18	392360045001401	18	472.2	4410.8	PHILADELPHIA ELECTRIC CO.EDDYSTONE	3371	1.3	55.9
19	080180045002001	18	444.4	4382.2	STAUFFER CHEM CO BOX 215 DEL CITY 19706	3350	1.3	57.1
20	392360045001404	18	472.2	4410.8	PHILADELPHIA ELECTRIC CO.EDDYSTONE	2503	1.0	58.1
21	311760045023081		478.0	4410.0	MOBIL OIL CORPORATION	2376	.9	59.0
22	311760045023082		478.0	4410.0	MOBIL OIL CORPORATION	2376	.9	59.9
23	392360045001403	18	472.2	4410.8	PHILADELPHIA ELECTRIC CO.EDDYSTONE	2279	.9	60.8
24	080180045000704	18	456.8	4399.3	DELMARVA POWER & LIGHT EDGEMOOR POWER PLANT WILM	2125	.8	61.6
25	3149000045009807		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	2081	.8	62.4
26	311760045022405		474.2	4409.8	DUPONT DE NEMOURS, E.I., & CO., INC.	2024	.8	63.2
27	311760045022607		487.6	4412.9	TEXACO INC	1958	.8	64.0
28	391200045002006	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1690	.6	64.6
29	391200045002008	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1690	.6	65.3
30	397160045151160	18	482.0	4417.3	GULF OIL CO OF PENNA, 30TH & PENROSE AVE	1681	.6	65.9
31	3149000045009804		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	1673	.6	66.5
32	3149000045009803		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	1620	.6	67.2
33	080180045000804	18	445.7	4382.9	DEL CITY POWER PLANT DP&L 800 KING ST WILM 19899	1581	.6	67.8
34	391200045002013	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1560	.6	68.4
35	391200045002009	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1509	.6	69.0
36	080180045002101	18	462.8	4406.3	SUNOLIN CHEM CO,BOX F, CLAYMONT 19703	1432	.6	69.5
37	3149000045009802		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	1320	.5	70.0
38	080180045003206	18	462.7	4406.0	ALLIED CHEM IND CHEM DIV CLAYMONT 19703	1310	.5	70.5
39	391200045002040	18	521.3	4444.2	UNITED STATES STEEL CORP.FAIRLESS	1305	.5	71.0
40	080180045000701	18	456.8	4398.9	DELMARVA POWER & LIGHT EDGEMOOR POWER PLANT WILM	1250	.5	71.5
41	3149000045009805		456.4	4392.5	ATLANTIC CITY ELECTRIC COMPANY	1230	.5	72.0
42	080180045000703	18	456.8	4399.3	DELMARVA POWER & LIGHT EDGEMOOR POWER PLANT WILM	1128	.4	72.4
43	080180045003219	18	462.7	4406.0	ALLIED CHEM IND CHEM DIV CLAYMONT 19703	1092	.4	72.8
44	397160045490403	18	483.9	4421.2	PHILA ELECTRIC CO, 2600 CHRISTIAN STREET	1059	.4	73.2
45	397160045151107	18	481.7	4417.5	GULF OIL CO OF PENNA, 30TH & PENROSE AVE	1018	.4	73.6
46	3149000045010001		459.6	4380.6	ANCHOR HOCKING CORPORATION	964	.4	74.0
47	3149000045010003		459.6	4380.6	ANCHOR HOCKING CORPORATION	920	.4	74.4
48	392360045002564	18	464.5	4406.8	SUN OIL CO. OF PENNSYLVANREFINERY	893	.3	74.7
49	311760045022601		487.6	4412.9	TEXACO INC	868	.3	75.0
50	311760045022826		487.6	4412.9	***-***-TEXACO INC	863	.3	75.4

MAJOR/MINOR POINT SOURCE DIVISION

The urban particle model which is to be used for this validation study will accept up to 300 emission points. As a result, in preparing the model input, ES had to select a maximum of 300 major sources for modeling as individual emission points. All other emission points were to be aggregated within the grid cell in which they were located and modeled as area sources.

Ideally, the emission points with the most significant impact on the six monitoring sites should be selected. However, in order to properly select those with the most significant impact, dispersion modeling is necessary. Modeling would allow consideration of the combined effects of meteorology, effective plume rise, location, emission intensity for the five pollutants of concern, and temporal variation of emissions during the monitoring period. Because major sources had to be selected before any modeling was completed, simpler techniques were applied in choosing the sources to be treated as individual emission points.

Meteorological data for the monitoring period were not available for selecting major sources and probably would have been too difficult to consider except in a very general sense. Therefore, the selection was based on particulate and SO_x emission rate along with emission point location and stack height. If a source has great enough emissions, it will generally have a significant impact regardless of its location or stack height. However, sources with lesser emissions that are located near enough to one of the monitoring sites could also have a significant impact.

ESRL requested that outside the 42.5 by 42.5 kilometer inventory area, only major sources be included in the model input. ES began the selection of major sources by examining the emission intensity of point sources outside the inventory area. With an emission cutoff of 500 tons per year of particulates or SO_x, approximately 50 major sources (stacks) resulted. Combining identical or very similar stacks within a plant was accounted for in arriving at this number of major sources. Because the model will accept a maximum of 300 major sources, selecting 50 outside the inventory area seemed consistent.

To select major sources within the inventory area, source impact on each monitoring site was considered. Stacks were chosen that had an impact on at least one monitoring site that was equal to or greater than the impact of the major sources outside the inventory area. The nearer the stack to a monitoring site and the lower its stack height, the lower the stack's emission rate needed to be for selection as a major source. About 15 kilometers from a monitoring site, a 250-ton emission rate was required for selection as a major source whereas within one kilometer, a five-ton emission rate was sufficient. Because each monitoring site was considered individually, some stacks were selected for more than one monitor. Once the complete list of stacks was compiled, it was checked against the temporal data described in Section 6 to eliminate any stacks that had little or no emissions during the monitoring period. The final list of major sources is provided in Appendix H.

INDUSTRIAL PROCESS FUGITIVE SOURCE INVENTORY

This section documents the methodology for development of an inventory of industrial process fugitive particulate emissions (IPFPE). The IPFPE inventory is included in the model validation to ensure consideration of particulate sources of significance not already included in the EIS point source inventory. IPFPE are defined as "particulate matter which escapes from a defined process flow stream due to leakage, materials charging/handling, inadequate operational control, lack of reasonably available control technology, transfer or storage". They are generated within the boundaries of an industrial facility and are not discharged to the atmosphere through a confined flow stream. Two types of IPFPE were considered:

- Process Fugitive Emissions - Particulate matter emitted from manufacturing processes such as emissions from metallurgical furnaces, mineral crushing operations, and coke batteries.

- Open Dust Fugitive Emissions - Particulate emissions in the form of natural or anthropogenic dusts that have become airborne due to wind or man's activity. These include dusts from open storage piles and vehicular traffic on plant roads.

A general methodology has been developed for identifying and quantifying sources of IPFPE (Reference 1). Initially, a review of the existing point source inventory is used to identify and list facilities that are potential sources of IPFPE. Utilizing process flow diagrams, the individual processes within each facility which generate fugitive emissions are identified. Those sources already included in the existing point source inventory are excluded from the IPFPE inventory to avoid double counting.

The fugitive emissions from each of the sources in the inventory are then quantified using on-site field measurements or estimates based on emission factors. Since measured emission data are rarely available, emission estimates are made using available emission factors (References 2, 3 and 4), facility activity parameters and/or process operating rates, and the efficiency of any control measures applied.

In this particular study, the emission estimates were further refined into two categories using available particle size data: particulate emissions less than 2.5 micrometers in diameter and particulate emissions between 2.5 micrometers and 10 micrometers in diameter (Section 5). Additionally, emissions from IPFPE sources with significant impact on a monitoring site were temporally distributed according to procedures described in Section 6.

A detailed description of the methodology utilized for this IPFPE inventory is presented in the following sections which include the problems encountered and alternate techniques developed to employ available process operating information.

Identification of IPFPE Sources

In developing the initial list of potential sources of IPFPE, ES reviewed a masterfile listing of all facilities emitting particulate matter in the 42.5 x 42.5 kilometer study area. Facilities covered by the following industrial categories which are generally sources of fugitive emissions (Reference 2) were included in the initial list:

- o Iron and steel production
- o Primary nonferrous smelting industry
- o Secondary nonferrous industries
- o Foundries
- o Materials extraction and benefication
- o Country and terminal grain elevators
- o Portland cement manufacturing
- o Lime manufacturing
- o Concrete batching
- o Asphaltic concrete production
- o Lumber and furniture industry

In addition, facilities having the following types of operations or potential emission points were also included (Reference 2):

- o Large coal storage piles
- o Other types of large storage or waste disposal piles
- o Extensive in-plant vehicular traffic

Information gathered in conjunction with development of the point source inventory was used to refine the initial listing of facilities. A number of facilities were not in operation during the sampling period and thus were deleted from the list. These included four potentially significant sources of IPFPE: two coke producers and two grain elevators (Section 6).

For each of the facilities remaining in the inventory, ES identified and listed the individual processes that could potentially generate fugitive particulate emissions. Fugitive emissions already entered and quantified in the point source masterfile, though technically IPFPE, were not considered to avoid double counting.

The Pennsylvania inventories to a large extent included process fugitive emission points as well as a value for their emissions. The New Jersey inventory was not as complete in this respect and did not include process fugitive emission points. Thus, for the New Jersey facilities ES had to list most of the possible points of fugitive particulate emissions at those types of facilities generally emitting fugitives. For the Pennsylvania facilities in the masterfile, ES concentrated on open dust sources of fugitives; in particular, plant haul roads, raw material storage piles, and coal storage piles.

Quantification of IPFPE Sources

Ideally, quantification of the process and open dust fugitive emission sources within each facility involves using (1) an appropriate emission factor,

(2) the process operating rate or an activity level, and (3) an estimate of the efficiency of fugitive emission control measures at the particular source. Unfortunately, process operating rates for the fugitive emitting processes not already listed in the masterfile were not readily available, nor was activity parameter information for storage pile extent and throughput, haul road length, and in-plant vehicular travel. Therefore, IPFPE were estimated using several different approaches depending on the facility type.

After reducing the initial list of source categories as previously described, the following industrial categories remained:

- o Foundries (storage piles, casting)
- o Secondary metal operations (metal preparation, casting)
- o Asphaltic concrete production (storage piles, transfer operations)
- o Concrete batching (storage piles, transfer operations)
- o Rock quarries (haul road travel, storage piles)
- o Coal-fired power plants (coal storage piles)

Typical IPFPE discharging processes in these categories which were not found in the masterfiles are shown in parentheses. For the first four industrial categories listed, estimates of IPFPE were calculated in a similar manner. Model plant data in Reference 2 were used to develop an IPFPE emission factor for an entire facility based on total production rate or related operating parameter. In most cases these operating parameters were readily available in the point source masterfile.

The model plant data used in developing the IPFPE inventory can be found in Tables 2-29, 2-32, 2-36, 2-39, 2-55, and 2-57 of Reference 2. The figures (in tons/year) for the typical processes (Reference 5) at the model plant in the column labeled "uncontrolled emissions" were summed and this value was divided by the parameter for total production found in the column labeled "operating parameter" (tons/year). This resulted in an emission factor describing the emissions per unit of production. This factor was then applied to operating rate information from the masterfile to yield an approximation of the total yearly IPFPE rate for each facility.

To estimate IPFPE from the coal storage pile and quarry emission sources, slightly different approaches were used. In the Philadelphia study area only one coal yard was found to be of a size large enough to create significant fugitive emissions; this yard is located at the Philadelphia Electric Company Eddystone Plant in Delaware County. To estimate emissions at this yard, the emission factor equations shown in Table 3.15 were utilized (Reference 3). In this particular case, the loadin/loadout emissions are covered in the point source inventory. The parameter values were chosen based on information in References 5 and 6.

In the case of quarries, all those in the study area were located in Montgomery County, Pennsylvania. Thus, the point source inventory was relatively complete in its listings of process and storage pile fugitive emission sources; only information on in-plant road emissions was lacking. Since no actual data was available on the lengths of the haul roads at each quarry and the vehicle-miles traveled (VMT) over those roads, information gathered

TABLE 3.15

EMISSION FACTOR EQUATIONS FOR STORAGE PILES

Batch Loadin/Loadout:

$$EF = 0.0018 \frac{\left(\frac{s}{5}\right)\left(\frac{U}{5}\right)}{\left(\frac{M}{2}\right)^2} \text{ lbs/ton loaded}$$

Active Storage Pile Maintenance and Traffic:

$$EF = 0.1\ K\ (s/1.5)\ (d/235) \text{ lbs/ton stored}$$

Active Storage Pile Wind Erosion:

$$EF = 0.05\ (s/1.5)\ (f/15)\ (D/90)\ (d/235) \text{ lbs/ton stored}$$

where: EF = suspended particulate emissions
s = silt content of stored material (%)
U = mean wind speed (mph)
M = material moisture content (%)
K = activity correction
d = number of dry days per year
f = percentage of time wind exceeds 12 mph
D = length of storage cycle (days)

previously at three other quarries in Pennsylvania was used to develop an emission factor based on total quarry production rate. Table 3.16 shows the emission factor equations for vehicle travel on paved and unpaved roads (Reference 3). Since the quarries visited previously in Pennsylvania had only unpaved haul roads, it was assumed that those in the present inventory also had unpaved haul roads. An emission factor in lbs per VMT was calculated using parameter values obtained from References 5 and 6.

Once the emission factor in lb/VMT was calculated, a factor for the VMT per unit of process was developed using the following data from the three plants:

Quarry	VMT (miles/yr)	Production (tpy)	VMT Per Ton Product
Martin Marietta	30,693	863,000	0.036
General Crushed Stone	56,271	993,600	0.056
Vanport Stone	21,300	385,400	0.055

The average of the three values yielded a factor of 0.050 VMT/ton product. This factor when multiplied by the emission factor based on VMT resulted in an emission factor based on tons of product. The haul road fugitive emissions were quantified for the quarries in the IPFPE inventory by multiplying this emission factor by the annual tons of product.

Following quantification of IPFPE for the facilities on the list, the inventory was summarized by source category. This information is presented in Table 3.17. The IPFPE data were then entered onto EIS/P&R coding forms and an EIS/P&R masterfile was created. Because the exact locations of the sources with IPFPE were not known, their emissions were treated as area sources and assumed to occur uniformly throughout the plant. Plant areas were not included in the masterfiles supplied by the regulatory agencies. ES therefore assumed that the emissions originated from area source grid cells whose southwest corners were located at the UTM coordinates provided in the point source masterfile for each plant. The grid cell size was assumed to be 0.5 kilometers on a side for the quarries and 0.2 kilometers on a side for the other sources including the coal storage pile.

TABLE 3.16

EMISSION FACTOR EQUATIONS FOR VEHICLE TRAFFIC
ON PAVED AND UNPAVED ROADS

Paved Roads:

$$EF = 0.09\ I\ (4/n)\ (s/10)\ (L/1000)\ (W/3)^{0.7}\ \text{lb/VMT}$$

Unpaved Roads:

$$EF = 5.9\ (s/12)\ (S/30)\ (W/3)^{0.7}\ (w/4)^{0.5}\ (d/365)\ \text{lb/VMT}$$

where: EF = suspended particulate emissions (lb/VMT)
s = silt content of road surface material (%)
S = average vehicle speed (mph)
W = average vehicle weight (tons)
w = average number of wheels per vehicle
d = dry days per year
I = industrial road augmentation factor
n = number of traffic lanes
L = surface dust loading on traveled portion of road (lb/mi)

TABLE 3.17

INDUSTRIAL PROCESS FUGITIVE PARTICULATE EMISSION INVENTORY (TONS PER YEAR OF TSP)

	Burlington, New Jersey 0660	Camden, New Jersey 0740	Gloucester, New Jersey 1760	Delaware, Pennsylvania 2360	Montgomery, Pennsylvania 6000	Philadelphia, Pennsylvania 7160	Totals
Utilities	0	0	0	197	0	0	197
Asphalt Production	59	444	56	0	103	24	686
Quarries	0	0	0	0	362	0	362
Concrete Batching	0	11	12	0	0	16	39
Foundries	0	0	91	31	0	0	122
Secondary Metals	0	11	0	0	0	0	11
Totals	59	466	159	228	465	40	1,417

REFERENCES

1. Sabo, Edward J., Methods for Identifying and Quantifying Industrial Process Fugitive Particulate Emissions, presented to APCA, June 1980.

2. Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions, EPA-450/3-77-010, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 1977.

3. Iron and Steel Plant Open Source Fugitive Emission Evaluation, EPA-600/2-79-103, Industrial Environmental Research Laboratory, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 1979.

4. Fugitive Emissions from Integrated Iron and Steel Plants, EPA-600/2-78-050, Industrial Environmental Research Laboratory, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 1978.

5. A Study of Existing and Projected Total Suspended Particulate Levels in the Southeast Pennsylvania Air Basin, prepared for the Pennsylvania Department of Environmental Resources by Engineering-Science, Fairfax, Virginia, May 1981.

6. Letter to Wyck Havens, Pennsylvania Department of Environmental Resources, Harrisburg, Pennsylvania, from Ed Sabo, Engineering-Science, June 6, 1980, concerning IPFPE inventory for Southeastern Pennsylvania.

SECTION 4

ANNUALIZED AREA SOURCE INVENTORY

INTRODUCTION

This section documents the methodologies used to compile a gridded, annualized area source inventory for the Philadelphia AQCR for TSP and SO_x. Table 4.1 identifies the area source categories considered and the order in which they are discussed in this section. The highway vehicle emission inventory was developed by DVRPC under subcontract to ES. Documentation for the highway vehicle inventorying effort is provided in Appendix C.

The documentation for each area source category in this section has been divided into four parts. The first part defines the category and describes how the base-year activity parameters were calculated. Next, projection factors for generating 1982 activity parameters are discussed. Projection factors were used to produce data for 1982 since the entire work effort to collect this information was conducted during 1982 and 1982 data were not yet available. The available data for each of the various activity parameters was projected to 1982 using appropriate projection information obtained from planning organizations in the AQCR. County activity parameter values for 1982 are provided on NEDS area source input forms in Appendix D. Emission factors are then listed for each category and their sources documented. Finally, allocation data sources and methodologies are discussed. Where methodologies differ from state to state, each is considered individually.

A computerized procedure was employed to generate gridded annual emissions by pollutant. First, county activity parameters were allocated to the subcounty grids. Second, the emission factor file was applied to generate annual emissions. County level activity was allocated to individual grids by one of two procedures, which are discussed later in this section.

In the development of the area source inventory, ES utilized existing inventories to the extent possible. These included the Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1), Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2), and the 1979 State Implementation Plans (SIPs) for the states of New Jersey and Pennsylvania. However, a portion of the inventory was prepared by applying more recent data and more up-to-date methodologies. In instances where existing inventory data were adequate, the data bases and methodologies were researched and documented for this study.

TABLE 4.1

CATEGORIES OF AREA SOURCES

1.	Fuel Use
2.	Construction Activity
3.	Construction Equipment
4.	Industrial Equipment
5.	Small Gasoline Engines
6.	Aircraft
7.	Vessels
8.	Railroads
9.	Forest Fires
10.	Agricultural Burning
11.	Prescribed Burning
12.	On-Site Incineration
13.	Structural Fires
14.	Agricultural Equipment
15.	Agricultural Tilling
16.	Unpaved Roads
17.	Unpaved Airstrips

Other sources of information included the Air Management Services (AMS) of the Philadelphia Department of Public Health, the Pennsylvania Department of Environmental Resources (PennDER), the Delaware Valley Regional Planning Commission (DVRPC), the Pennsylvania Department of Transportation (PennDOT), New Jersey Department of Environmental Protection (NJDEP), and New Jersey Department of Transportation (NJDOT). In addition, data were obtained from the forestry, agriculture, and recreation agencies in each of the inventoried states.

The annualized area source emission inventory summarized by county for 1982 is shown in Table 4.2. Other portions of this study specific to area sources include profiles for particle size, sulfates, and sulfur dioxide (Section 5) and temporal resolution of emissions (Section 6).

Allocation Parameters

County activity parameters were allocated to a grid system consisting of 289 square grids, each of which is 2.5 kilometers on a side (Figure 4.1). The study area is comprised of eight counties: Philadelphia, Bucks, Chester, Delaware, and Montgomery Counties in Pennsylvania and Gloucester, Burlington, and Camden Counties in New Jersey. DVRPC provided population and two-digit SIC employment for census tracts in all eight counties.

In order to make use of the allocation data supplied by DVRPC, it was necessary to interpolate the data to 1982. Because only the relative percentage of each parameter within the subdivisions of each separate county was important, a linear approach to interpolation was used.

Census tract data from DVRPC were linearly interpolated to 1982 using the "2000 plan", since census tract data were available in this form only. The data obtained in this manner for each study year were transformed to the area source grid system using an ES computer program, AQZTOGR. Basically, this program transforms input parameters on the basis of the portion of the census tract that lies within each grid. Uniformity of distribution of employment and population within each census tract was assumed.

The allocation parameters linearly interpolated from DVRPC census tract data included: population, commercial employment, construction employment, agricultural employment, manufacturing employment, total employment, four categories of vehicle-miles travelled, and occupied households. The grid allocation parameters for 1982 are shown in Appendix E.

In cases where county activity levels were allocated to specific locations, this was noted in the individual category writeups. The methodology presented in this section describes the generation of surrogate allocation parameters only.

Activity Parameter Projections

County population and two-digit SIC employment data for 1982 were obtained for the eight counties by a special interpolation process suggested by DVRPC. This process involved two plans concerning population and employment

TABLE 4.2

SUMMARY OF 1982 AREA SOURCE EMISSIONS

County, State	Tons/Year[a]	
	TSP	SO_x
Bucks, PA	5,474	6,649
Chester, PA	4,300	4,786
Delaware, PA	2,138	9,135
Montgomery, PA	6,544	14,225
Philadelphia, PA	4,794	11,129
Burlington, NJ	4,789	2,581
Camden, NJ	2,271	5,372
Gloucester, NJ	1,383	3,314
Totals	31,693	57,191

[a] Emission values in this table and other tables in Section 4 are for entire counties -- not just portion of counties within area source grid.

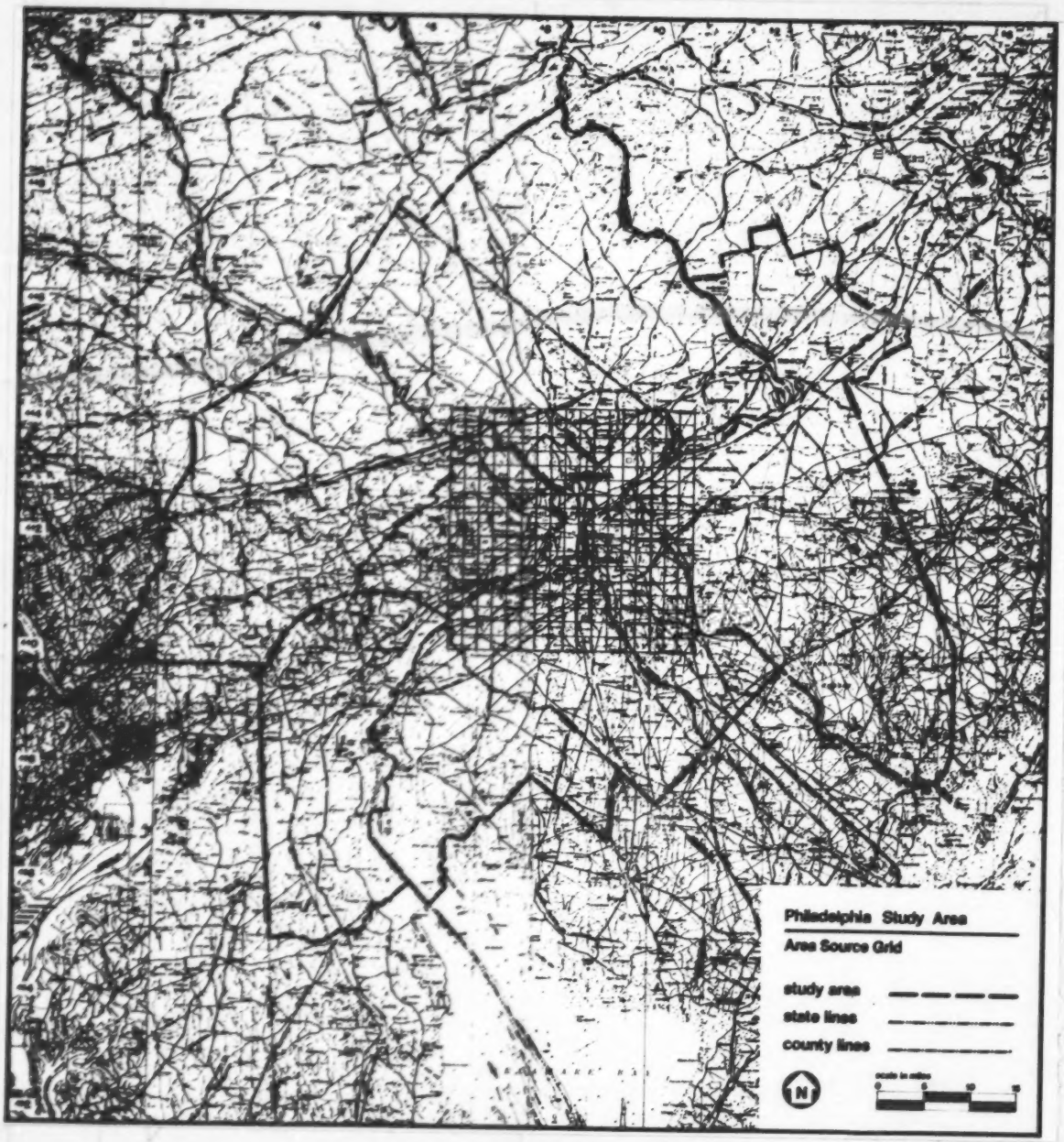

Figure 4.1 Area Source Grid System

projections. Basically, the "2000 plan" was interpolated using the "208 plan". The following formula shows how 1982 population figures were calculated for each of the eight counties:

$$\text{Population for 1982} = \left[(\text{2000 pop.} - \text{1970 pop.})\text{"2000 plan"} \times \left(\frac{\text{1982 pop.} - \text{1970 pop.}}{\text{2000 pop.} - \text{1970 pop.}} \right) \text{"208 plan"} \right] + \text{1970 pop. "2000 plan"}$$

The population and employment categories were projected from a base year which varied from category to category and state to state. Since the inventory year for this study was 1982, all activity parameters are actually projections from an earlier year. The population projections resulting from this process are shown in Table 4.3. Table 4.4 shows the various employment classifications and their projections.

Projection data applied to each area source category are presented in the sections that follow. The methodology presented in this section describes the generation of the most commonly used projection factors. Projection factors based on the extrapolation of historical trends are discussed for the categories where the method was applied.

1. FUEL USE

This category is split into several subcategories. These include the combustion of coal, oil, natural gas, and wood not covered in the point source inventory. Furthermore, these subcategories are classified as to whether they are residential, commercial/institutional, or industrial.

Because of the complex and varied nature of the available data, varying methodologies were used for different parts of the study area and for different subcategories. Some of the major data sources include the Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 1), data acquired from AMS in Philadelphia, and data collected directly from natural gas suppliers. This category is divided into subsections to facilitate the presentation of the various methodologies.

Fuels Except Natural Gas

Philadelphia County

The major source for all area source data in Philadelphia County was AMS. AMS provided detailed information for the use of anthracite coal, distillate oil, and residual oil by subcategory (residential, commercial/institutional, or industrial). These figures represented area sources only. AMS personnel conducted a fuel balance for point and area sources in order to avoid any double-counting of fuels.

TABLE 4.3

POPULATION FOR 1982

County	Population Projections
Burlington	372,082
Camden	515,149
Gloucester	213,207
Bucks	483,831
Chester	305,052
Delaware	621,486
Montgomery	690,041
Philadelphia	1,942,057

Source: Delaware Valley Regional Planning Commission.

TABLE 4.4

1982 EMPLOYMENT PROJECTIONS

County	Mfg.	Const.	Whole-Sale	Retail	C/I
Bucks	57,628	10,778	4,811	30,381	85,830
Chester	41,012	5,829	3,842	16,405	55,765
Delaware	61,840	13,562	7,031	37,536	107,109
Montgomery	119,132	26,041	18,408	55,222	163,272
Philadelphia	268,385	47,578	71,448	159,721	613,442
Burlington	26,050	5,147	3,735	21,869	62,023
Camden	47,985	9,617	10,516	35,281	101,757
Gloucester	14,571	2,380	2,075	10,992	31,041

Source: Delaware Valley Regional Planning Commission and New Jersey Toward the Year 2000: Employment Projections (Reference 2).

Other Counties

For the other seven counties, activity parameters from the Regional Emission Inventory and and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 1) were used. The activity parameters were calculated based on procedures given in Guidelines for Air Quality Maintenance Planning and Analysis (Reference 3). The activity parameters generated were: all residential anthracite and distillate oil use, area source commercial/institutional use for the same fuels, and bituminous coal use for the light industrial (area source) category. Fuel usage by point sources was accounted for to ensure that no double-counting of fuel use occurred in the area source inventory.

The activity parameters used in this section were included in other inventories. Emissions calculations in both the Pennsylvania and the New Jersey SIPs for the fuel category were based on the Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 1).

Natural Gas

Natural gas usage in Pennsylvania was obtained from Philadelphia Electric Company, which supplies all the natural gas for the five-county area. The data represent a 12-month period in 1978 and 1979, and totals were divided into three subcategories - residential, commercial/institutional, and industrial for each county. Next, point source natural gas usage totals for 1979 were subtracted from the total figures, and the resulting numbers were used as area source activity parameters.

A similar process was followed for the New Jersey portion of the study area. Detailed information was acquired from Public Service Electric and Gas Company of Newark, New Jersey. The data were as recent as May 1979.

Projections

Since several methodologies were used in this section, the projections were performed from different base years to the required inventory year. First, some general assumptions were made with respect to coal and oil use. It was evident from discussions with local officials at AMS and PennDER that residential coal use is decreasing in the Philadelphia AQCR. From data acquired in Energy Data Reports, Coal - Pennsylvania Anthracite for the Calendar Year 1977 (Reference 4), the average decrease in residential coal use in the state of Pennsylvania during the middle to late seventies was 11.5 percent per year. Therefore, all data on residential coal use (base year 1974) in Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 1) were decreased by this amount through 1982. Area source commercial/institutional and industrial coal use was assumed to increase in accordance with commercial or manufacturing employment until 1979 and remain constant thereafter.

Oil use in 1979 was determined by using available projection factors. The New Jersey and Pennsylvania SIPs both suggested using population as a

projection factor for residential fuel use, so these were used for projecting residential oil use. However, due to the nation's commitment to curtail the use of imported oil, the 1979 levels of residential oil were kept constant for the 1982 inventory. It is assumed that the energy requirement represented by the curtailed oil imports can be met by the projected increases in use of natural gas and existing electric generating capacity. These projection methodologies were approved by local officials at AMS. Commercial/institutional and light industrial oil use was projected to increase slightly according to commercial/institutional and manufacturing employment, respectively.

Natural gas usage was projected according to figures obtained from the major natural gas suppliers (Public Service and Gas Company and Philadelphia Electric Company). Also, wood consumption as a fuel was projected according to population (residential subcategory only).

Emission Factors

The emission factors used were those presently included in the Aerometric and Emissions Reporting System (AEROS). They are listed according to fuel type and pollutant type in Table 4.5. County-level TSP and SO_x emissions from fuel use are summarized in Table 4.6.

Allocation

Residential fuel use was allocated by dwelling units for all counties. For commercial/institutional fuel use, commercial employment was used as the allocation parameter. Industrial fuel use allocation was made by manufacturing employment.

2. CONSTRUCTION ACTIVITY

This source category, applicable to particulate matter only, includes dust generated from construction sites by the movement of construction vehicles, by earth handling operations, and by wind erosion. The quantity of emissions depends upon the area of land being worked, the level of construction activity, and the physical characteristics of the soil such as silt and moisture content. Not included are exhaust emissions from construction equipment.

Detailed construction records were not available; therefore, it was necessary to use estimation methods developed by EPA (Reference 39). These methods use construction expenditures to estimate statewide construction acreage (see Table 4.7). Construction expenditures were obtained from Reference 20. The state total was then disaggregated to the counties on the basis of heavy construction employees (References 16 and 40). The result of these calculations is shown in Table 4.8. The silt and moisture content of the soil were taken from AP-42 and assumed to be uniform across the counties.

Very high values were found in Philadelphia County. After consulting with the Department of Licenses and Inspection in Philadelphia County, it was estimated that non-residential and residential construction acreage per

TABLE 4.5

RESIDENTIAL, COMMERCIAL/INSTITUTIONAL, AND INDUSTRIAL FUEL USE EMISSION FACTORS

Fuel Category	Fuel Type	Units	Emission Factors	
			TSP	SO_x
Residential	Anthracite	(lb/10^2 ton)	1,000	3,800S[a]
	Distillate Oil	(lb/10^4 gal)	25	1,440S[a]
	Natural Gas	(lb/10^7 cf)	100	6
	Wood	(lb/10^2 ton)	2,500	50
Commercial	Anthracite	(lb/10 ton)	10A[a]	380S[a]
	Distillate Oil	(lb/10^4 gal)	20	1,440S[a]
	Residual Oil	(lb/10^4 gal)	169	1,590S[a]
	Natural Gas	(lb/10^7 cf)	100	6
	Bituminous Coal	(lb/10 ton)	20A[a]	380S[a]
	Wood	(lb/10^2 ton)	100	15
Industrial	Bituminous Coal	(lb/10 ton)	52A[a]	380S[a]
	Distillate Oil	(lb/10^4 gal)	20	1,440S[a]
	Residual Oil	(lb/10^4 gal)	183	1,590S[a]
	Natural Gas	(lb/10^7 cf)	100	6

[a] Sulfur (S) and ash (A) contents shown on NEDS input forms in Appendix D.

Source: Aerometric and Emissions Reporting System (Reference 33).

TABLE 4.6

1982 AREA SOURCE FUEL USE EMISSIONS (tpy)

County	Residential		Commer./Inst.		Industrial	
	TSP	SO_x	TSP	SO_x	TSP	SO_x
Bucks	202	2,249	223	2,158	219	1,899
Chester	168	1,712	152	1,463	175	1,444
Delaware	236	2,673	312	3,018	243	2,001
Montgomery	326	3,351	528	4,542	1,582	5,949
Philadelphia	1,028	4,446	558	2,804	---	---
Burlington	170	897	191	795	66	45
Camden	229	1,486	412	1,751	179	245
Gloucester	82	912	87	395	61	89

TABLE 4.7

1980 ACRES OF CONSTRUCTION FOR PENNSYLVANIA

Type of Construction	Estimated Acres Per 10^6	Value 10^6	Total Acres
Non-Residential	2.75	1,928	5,302
Residential	8.0	1,591	12,728
Non-Building	25.0	1,599	39,975
Total		5,118	58,005
State Total Heavy Construction Employment			39,965

1980 ACRES OF CONSTRUCTION FOR NEW JERSEY

Type of Construction	Estimated Acres Per 10^6	Value 10^6	Total Acres
Non-Residential	2.75	1,571	4,320
Residential	8.0	1,319	10,552
Non-Building	25.0	716	17,900
Total		3,606	32,772
State Total Heavy Construction Employment			16,626

TABLE 4.8

ACRES OF CONSTRUCTION BY COUNTY

County	Construction Employees	Percent of State Total	Acres	
			1980	1982
Bucks	1,020	2.6	1,508	1,512
Chester	638	1.6	928	928
Delaware	1,486	3.7	2,146	2,152
Montgomery	3,728	9.3	5,394	5,440
Philadelphia	9,732	24.4	5,826[a]	5,916[a]
Burlington	1,115	6.7	2,196	2,218
Camden	1,051	6.3	2,065	2,093
Gloucester	278	1.7	557	566

[a] Adjusted total according to information acquired from Philadelphia Department of Licenses and Inspection.

construction dollar were about 40 percent of the national average. Using this figure a lower, but still rather large figure was calculated. These results are given in Table 4.8.

Projections

The 1982 emissions resulting from construction activity were determined from projected changes in construction employment for each county as contained in Reference 41.

Emission Factors

The TSP emission factor for construction activity was a modified version of the factor taken from Compilation of Air Pollutant Emission Factors (Reference 9). The resulting annual emission factor of 625 lbs/acre accounted for a Thornwaite precipitation-evaporation index specific to the Philadelphia area and an estimated 50% efficiency in fugitive dust control.

County-level TSP emissions for the construction activity are shown in Table 4.9.

Allocation

Allocation for this category was made according to the number of construction employees since the actual location of construction was not available.

3. CONSTRUCTION EQUIPMENT

This source category includes off-highway construction equipment which consumes either gasoline or diesel fuel. Again, because of different data sources, activity levels within each state were computed independently. Using national averages from Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 5), it was determined that the ratio of diesel to gasoline construction fuel use is 93/7.

To calculate diesel construction equipment fuel use in New Jersey, the state diesel farm tractor fuel usage was subtracted from the off-highway diesel fuel use found in the Mineral Industry Surveys, Sales of Fuel Oil and Kerosine in 1975 (Reference 14). The resulting number of gallons was attributed to diesel construction equipment for the entire state. The statewide fuel usage was then proportioned to the counties based on construction employment.

For Pennsylvania, construction diesel fuel use was obtained from the 1979 Pennsylvania SIP. In this document, the activity parameter (gallons of diesel fuel used) was obtained from the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 15). The state total was then apportioned to counties by the number of construction employees listed in the County Business Patterns 1976 Pennsylvania (Reference 16).

TABLE 4.9

1982 CONSTRUCTION ACTIVITY EMISSIONS (tpy)

County	TSP
Bucks	473
Chester	290
Delaware	673
Montgomery	1,700
Philadelphia	1,849
Burlington	693
Camden	654
Gloucester	177

Projections

Changes in construction employment for each county were used to project data to 1982. Construction employment projections for each county are noted in the introduction to this chapter.

Emission Factors

Construction equipment emission factors were calculated from Compilation of Air Pollutant Emission Factors (Reference 9) by weighting the emission factor for each type of equipment in accordance with its relative percent use. Gasoline equipment and diesel equipment emission factors were calculated separately. The results are shown in Table 4.10. Construction equipment TSP and SO_x emissions are listed by county in Table 4.11.

Allocation

Allocation to subcounty grids was made in proportion to construction employment for 1982 as determined from data supplied by DVRPC.

4. INDUSTRIAL EQUIPMENT

Industrial equipment is gasoline- or diesel-powered machinery including forklifts, generators, and pumps. According to officials at the U.S. Department of Energy, industrial equipment fuel use is not classified as off-highway but as industrial fuel use in the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 15). The activity parameter for this category, gallons of fuel consumed, is the product of national industrial equipment fuel use and the ratio of county to national employment in SICs 10-14, 20-39, 50, 51 (Table 4.12). National fuel use was obtained from the U.S. EPA Monitoring and Data Analysis Division (Reference 12). County employment is available in County Business Patterns (References 6 and 7). National employment is from the General Summary 1977 Census of Manufacturers (Reference 10) (SICs 20-39) and the U.S. Department of Labor Statistics (Reference 18)[a].

Projection

Industrial equipment fuel use was projected by manufacturing employment.

Emission Factors

Emission factors shown in Table 4.13 were developed from Compilation of Air Pollutant Emission Factors (Reference 9).

Industrial equipment TSP and SO_x emissions are summarized in Table 4.14.

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[a] National Employment in SICs 10-14, 50 and 51 equals $5,521 \times 10^3$ employees.

TABLE 4.10

CONSTRUCTION EQUIPMENT EMISSION FACTORS

Pollutant	Gasoline Equipment (lbs/10^3 gallons)	Diesel Equipment (lbs/10^4 gallons)
Particulates	7.05	243.5
Sulfur Oxides	5.28	311.6

Source: Compilation of Air Pollutant Emission Factors (Reference 9), Tables 3.2.7-1 and 3.2.7-2.

TABLE 4.11

1982 CONSTRUCTION EQUIPMENT EMISSIONS (tpy)

County	TSP	SO_x
Bucks	8	10
Chester	6	7
Delaware	24	30
Montgomery	48	61
Philadelphia	100	127
Burlington	6	7
Camden	29	36
Gloucester	1	1

TABLE 4.12

1982 INDUSTRIAL EQUIPMENT ACTIVITY

County	Employment SICs 10-14,20-39,50,51	Fuel Use (10^3 gal) Gasoline	Diesel
Bucks	56,893	991	2,714
Chester	41,670	727	1,989
Delaware	43,695	762	2,085
Montgomery	114,119	1,989	5,445
Philadelphia	190,968	3,329	9,113
Burlington	26,029	453	1,242
Camden	42,039	733	2,006
Gloucester	16,176	282	763
National	24,037[a]	419[b]	1,147[b]

a 10^3 employees.
b 10^6 gallons.

Source: County Business Patterns (References 6 and 7); General Summary 1977 Census of Manufacturers (Reference 10); and U.S. Department of Labor Statistics (Reference 18).

TABLE 4.13

INDUSTRIAL EQUIPMENT EMISSION FACTORS
($lb/10^3$ gal)

Pollutant	Gasoline Equipment	Diesel Equipment
Particulates	6.47	33.5
Sulfur Oxides	5.31	31.2

Source: Compilation of Air Pollutant Emission Factors (Reference 9), Table 3.3.3-1.

TABLE 4.14

1982 INDUSTRIAL EQUIPMENT EMISSIONS (tpy)

County	TSP	SO_x
Bucks	48	45
Chester	35	33
Delaware	37	35
Montgomery	97	90
Philadelphia	164	151
Burlington	22	20
Camden	36	33
Gloucester	14	13

Allocation

Industrial equipment fuel use was allocated by manufacturing employment.

5. SMALL GASOLINE ENGINES

Information contained in Compilation of Air Pollutant Emission Factors (Reference 9) indicates that 89% of small gasoline engines are used in lawn and garden equipment, while the remainder falls into the miscellaneous category. There are two types of engines available for this purpose: two-stroke and four-stroke. Calls to local dealers revealed that 80% of the lawn and garden equipment sold today is four-stroke. Table 4.15 shows the approximate breakdown of small engines by use and also their approximate annual fuel consumption from Compilation of Air Pollutant Emission Factors (Reference 9). Using the information from this table, the weighted average usage per unit-year, 12.7 gallons, was found. In order to account for meteorological differences between Philadelphia and other areas of the nation, a temperature correction was applied to this figure. From Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 5), the average number of days in the year when the minimum temperature is greater than 32°F in the study area should be divided by the same figure for the national average. For the Philadelphia AQCR, this factor is 256/250; when applied to the 12.7 gallons per unit-year, the resulting figure is 13.0 gallons per unit-year. From Compilation of Air Pollutant Emission Factors (Reference 9), there are about 0.21 units/person which should be adjusted for the dwelling unit structure distribution. According to the 1970 Census of Housing, Housing Characteristics for States, Cities, and Counties, Pennsylvania (Reference 19), the percent of multiple-unit structures varies from 21.4 in Bucks County to 33.4 in Philadelphia County. The national average as obtained from Statistical Abstract of the United States 1977 (Reference 20) is 26% multiple-unit structures; therefore, the number of units/person, assuming a linear relationship, should vary from 0.163 to 0.255. These values are specified in Table 4.16 for each county in the study area. The table shows adjusted factors and their product, which is the county fuel consumption in this category.

Projections

Fuel usage for this category was projected according to population.

Emission Factors

A weighted average of the emission factors for the three types of engines was calculated according to relative fuel consumption and percent in use shown in Table 4.15. The results are shown in Table 4.17.

County-level TSP and SO_x emissions from small gasoline engines are listed in Table 4.18.

TABLE 4.15

SMALL GASOLINE ENGINE DATA

	Percent in Use	Average Annual Fuel Use (gal/unit)
Four-stroke miscellaneous	11	12.3
Two-stroke lawn and garden	18	20.6
Four-stroke lawn and garden	71	10.8

Source: Calculated from Compilation of Air Pollutant Emission Factors (Reference 9), Table 3.2.5-1.

TABLE 4.16

FUEL CONSUMPTION BY SMALL GASOLINE ENGINES

County	Adjusted Consumption per Unit per Year	Number of Units per Capita	1982 Population	1982 Consumption (1,000 gal)
Bucks	13 gal	0.255	483,843	1,604
Chester	13 gal	0.231	305,425	917
Delaware	13 gal	0.244	621,365	1,971
Montgomery	13 gal	0.221	689,535	1,981
Philadelphia	13 gal	0.163	1,942,001	4,115
Burlington	13 gal	0.243	373,222	1,179
Camden	13 gal	0.248	514,715	1,659
Gloucester	13 gal	0.225	214,281	627

TABLE 4.17

SMALL GASOLINE ENGINES EMISSION FACTORS

Emission Factors (lbs/10^3 gal)	
TSP	SO_x
19.5	4.9

Source: Calculated from Compilation of Air Pollutant Emission Factors (Reference 9), Table 3.2.5.1.

TABLE 4.18

1982 SMALL GASOLINE ENGINE EMISSIONS (tpy)

County	TSP	SO_x
Bucks	16	4
Chester	9	2
Delaware	19	5
Montgomery	19	5
Philadelphia	40	10
Burlington	11	3
Camden	16	4
Gloucester	6	2

Allocation

Allocation to subcounty grids was performed in proportion to the number of occupied households for 1982 as determined from data supplied by DVRPC.

6. AIRCRAFT

The county activity parameter needed to calculate emissions is the number of landing-takeoffs (LTOs). The New Jersey State Airport System Plan, 1975 Summary Report (Reference 21) and the Pennsylvania Statewide Airport System, Technical Report 1 (Reference 22) listed airport operations for the following aircraft categories: military, civil, and commercial. LTOs were calculated for each airport in the Philadelphia area by dividing operations by two. Airports were then matched to appropriate counties. For all airports within a county, LTOs for each category (civil, commercial, or military) were added to arrive at county activity parameters.

Projections

The FAA Aviation Forecasts, Philadelphia (Reference 23) provided estimates of growth rates in air traffic for the Pennsylvania counties as follows:

- Civil Aircraft - 3.7%/year
- Commercial Aircraft - 5.5%/year

The New Jersey State Airport System Plan, 1975 Summary Report (Reference 21) was utilized for growth estimates in New Jersey. Using this information, LTOs for each of these categories were projected to 1982. Military aircraft operations were assumed to have no growth, based on conversations with local military officials.

Emission Factors

Air Pollution Emission Factors for Military and Civil Aircraft (Reference 24) provided emission factors by aircraft type. However, a detailed breakdown of LTOs by type of aircraft for each airport was not available. Therefore, specific aircraft emission factors could not be used. The New Jersey State Airport System Plan, 1975 Summary Report (Reference 21) and the Pennsylvania Statewide Airport System, Technical Report 1 (Reference 22) provided based-aircraft-fleet-mix data for generalized categories of aircraft by airport and year. The categories of aircraft used in the based fleet mix data were then matched to specific aircraft types in Air Pollution Emission Factors for Military and Civil Aircraft (Reference 24) as shown in Table 4.19. By arithmetically averaging individual aircraft type emission factors, one composite emission factor for each aircraft class was developed as shown in Table 4.20.

From the data in these tables, emission factors were then developed at the county level by aircraft category (civil, commercial, and military) for purposes of input to the emission factor file. In order to accomplish this,

TABLE 4.19

FLEET MIX CLASSIFICATION

Aircraft Description	Aircraft Class	Representative Aircraft Types Used to Calculate Emission Factors	No. of Engines
Heavy Jets	AA	Boeing 707-320B	4
		Boeing 747-200B	4
		Lockheed L1011-200	3
		Lockheed L1011-100	3
		McDonnell Douglas DC-8	4
		McDonnell Douglas DC-10	3
Large Jets	A	Boeing 727-200	3
Small Jets	B	BAC 111-400	2
Large Turboprops		Boeing 737-200	3
Piston Transports		McDonnell Douglas DC-9-50	2
		GD/Convair 580	2
		Fairchild F27 and FH227	2
		Grumman Goose	2
		Lockheed L188 Electra	4
		Lockheed L100 Hercules	4
Heavy Twins	C	Beech 9	2
		Dehavilland Twin Otter	2
		Swearingen Metro-2	2
		Cessna Citation	2
		Dessault Falcon 20	2
		Gates Learjet 24D	2
		Gates Learjet 35,36	2
		Rockwell Shoreliner 75A	2
		Beech B99	2
		Shorts Skyvan 3	2
		Swearingen Merlin 111A	2
Light Twin Engine Aircraft	D	Cessna Skymaster	2
Large Single Engine Aircraft		Piper Navajo Chieftain	2
Light Single Engine Aircraft	E	Cessna 150	1
		Piper Warrior	1

TABLE 4.19--Continued

Aircraft Description	Aircraft Class	Representative Aircraft Types Used to Calculate Emission Factors	No. of Engines
Military Turbine	--	C-5A	4
		C-130	4
		KC-135	4
		C-141	4
Military Twin Piston	--	C-1 Trader	2
		O-2	2
		S-2 Tracker	2
Military Single Piston	--	T-28 Trojan	1
		T-34 Mentor	1
		T-41 Mescelero	1
		O-1 Bird Dog	1
Military Helicopter	--	Iroquois/Huey	1

TABLE 4.20

AIRCRAFT CLASS EMISSION FACTORS

Aircraft Description	Aircraft Class	Emission Factors (lbs/LTO) TSP	SO_x
Commercial and Civil Aircraft			
Heavy Jet	AA	2.04	5.72
Large Jet	A	1.17	3.27
Small Jets & Piston Transports	B	0.38	1.43
Heavy Twin Piston	C	0.46	0.41
Light Twin Piston Large Single Piston	D	0	0
Light Single Piston	E	0	0
Military Aircraft			
Turbine	--	18.21	4.45
Twin Piston	--	0	0
Single Piston	--	0	0
Helicopter (Huey)	--	0	0.20

Source: Calculated from Air Pollution Emission Factors for Military and Civil Aircraft (Reference 24).

it was assumed that the civil and commercial LTOs at each airport were proportional to the based aircraft ratios supplied by the State DOTs. For example, at Buehl Field, Bucks County, PA, 90% of the fleet is single engine aircraft, and 10% is twin engine aircraft. Therefore, 90% of the civil and commercial LTOs were attributed to single engine, Class E aircraft, and 10% of each aircraft category was attributed to twin engine, Class D aircraft. Emissions were calculated in this fashion for each airport. Finally, by summing emissions for airports in a particular county and dividing by the appropriate total county LTOs, a county wide emission factor was obtained.

County-level TSP and SO_x emissions from aircraft are listed in Table 4.21.

Allocation

Spatial detail information concerning aircraft approach and climbout could not be readily obtained for each airport. In general, consideration was given to airport location within a grid and the primary approach and climbout vectors for each airport.

For smaller airports, the location of the airport within a grid was determined by U.S.G.S. quadrangle maps. If the airport was located near a grid boundary, emissions were split among the affected grid cells. For the Philadelphia International Airport, a more extensive analysis was warranted. The primary direction of landing-takeoffs at this airport is eastwest. Aircraft holding patterns are within four miles of the airport at a maximum altitude of 3,000 feet in all approach directions. Emissions were distributed to a total of nine grids based upon this information. Emission factors for the LTO cycle are composed of contributions from idle/taxi, takeoff, approach, and climbout. Data presented in AP-42 (Reference 9) indicate that the approach and climbout components comprise approximately 40% of the total emission factor. Since it is these operational modes that cause emissions outside the grid containing the runways, 40% of the total emissions from Philadelphia International Airport were allocated to the eight surrounding grids. Equal emission levels were assigned to each of the eight grids to reflect the use of all possible approach and climbout directions.

There are no airports and consequently no aircraft emissions in Camden County.

7. VESSELS

The major emission sources in this category are commercial vessels which navigate from the mouth of the Delaware Bay up the Delaware River. Recreational vessels were also considered and are composed of two types: diesel and gasoline-powered. Emissions from recreational diesel vessels were calculated and determined to be insignificant relative to larger commercial vessel emissions. Recreational gasoline vessels are used primarily on lakes, rivers, and estuaries, and unlike their diesel-powered counterparts, contributed significantly to overall emissions.

TABLE 4.21

1982 AIRCRAFT EMISSIONS (tpy)

County	TSP	SO_x
Bucks	---	1
Chester	1	1
Delaware	7	17
Montgomery	1	3
Philadelphia	25	70
Burlington	5	4
Camden	---	---
Gloucester	10	33

Fuel consumption was determined for two vessel travel modes: underway and inport. Underway commercial vessel fuel consumption was estimated from ton-mile statistics in the Waterborne Commerce of the United States, Calendar Year 1974, Part I Waterways and Harbors Atlantic Coast (Reference 25) and a 590 Btu/ton-mile fuel requirement calculated from The Effect of Fuel Price Increases on Energy Intensiveness of Freight Transport (Reference 26) and Energy Intensiveness of Passenger and Freight Transport Modes (Reference 27). In order to distinguish between diesel and residual oil consumption for underway vessels, a diesel-to-residual fuel use ratio of 9:91 was calculated using the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 15) for the study area. The intracoastal commercial vessel fuel consumption was apportioned to counties based on linear miles of navigable river.

Inport fuel consumption was obtained by determining the number of ships with draft greater than 18 feet for each of the ports. This information was available in the Waterborne Commerce of the United States, Calendar Year 1974, Part I Waterways and Harbors Atlantic Coast (Reference 25). The following assumptions from Guide for Compiling a Comprehensive Emission Inventory (Reference 28) were used in the calculation of fuel consumption: (1) only vessels with a draft of 18 feet or greater are under their own power while in port, and (2) each vessel is in port an average of three days.

Commercial vessel activity is summarized in Table 4.22.

Activity parameters for gasoline motorboat use were developed using the following equations for inboard and outboard fuel use from Procedures (Reference 5).

Inboard gasoline consumption (gal/yr) = # registered inboards x 3 gal/hr x 10 (C) hr/yr

Outboard gasoline consumption (gal/yr) = # registered outboards x 1.5 gal/hr x 10 (C) hr/yr

where: C = the number of months during which the monthly mean temperature exceeds 48°F.

A seven-month boating season was used in these calculations.

Motorboat registrations were reported differently in each of the states so that varying assumptions were needed. In Pennsylvania, PennDER (Reference 29) reported the total number of registered inboards and outboards in the state for the following size classifications: 16 ft and less; 17-25 ft; 26-40 ft; 41-65 ft. as shown in Table 4.23. It was assumed that 50% of the inboard boats greater than 25 ft in length were gasoline-powered and the remainder diesel-powered (0.4% of the total). This information was then used to calculate the gasoline-powered inboard/outboard split for total registrations listed in Table 4.24.

In New Jersey, the number of boats less than 22 ft and 22 ft and greater in length were reported by county in the Survey of New Jersey's Registered Motorboat Fleet (Reference 30). Based on information obtained from PennDER

TABLE 4.22

COMMERCIAL VESSEL ACTIVITY FOR 1982
(10^4 gallons)

County	Diesel	Residual
Bucks	4	44
Chester	---	---
Delaware	49	467
Montgomery	---	---
Philadelphia	120	1,186
Burlington	31	305
Camden	72	708
Gloucester	80	760

TABLE 4.23

PENNSYLVANIA STATE TOTAL MOTORBOAT REGISTRATIONS (1978)

Size	Inboard	Outboard
16 ft. and less	822	114,310
Aux. Sail	3	956
17-25 ft.	10,781	29,228
Aux. Sail	26	1,577
26-40 ft.	1,209	510
Aux. Sail	50	49
41-65 ft.	108	18
Aux. Sail		1

Source: Fish Commission, Pennsylvania Department of Environmental Resources (Reference 29).

TABLE 4.24

PENNSYLVANIA COUNTY MOTORBOAT POPULATION (1978)

County	Total	Gasoline	
		Inboard	Outboard
Bucks	6,762	488	6,246
Chester	2,178	158	2,010
Delaware	2,899	210	2,678
Montgomery	5,368	387	4,959
Philadelphia	3,894	281	3,597

Source: Fish Commission, Pennsylvania Department of Environmental Resources (Reference 29).

(Reference 29), all boats less than 22 ft and 50% of the boats greater than or equal to 22 ft in length were assumed to be gasoline outboard. Twenty-five percent of the boats 22 ft or greater in length were assumed to be gasoline inboard. Motorboat registrations for New Jersey are listed by county in Table 4.25. Annual gasoline consumption of recreational vessels is listed by county in Table 4.26.

Projections

Historical trends in ton-miles of traffic were analyzed from data in Waterborne Commerce of the United States, Calendar Year 1974, Part I Waterways and Harbors Atlantic Coast (Reference 25). Projection factors for ton-miles were applied to the base year fuel data to estimate 1982 fuel consumption by commercial vessels.

Pleasure boat fuel consumption was projected to increase in proportion to population.

Emission Factors

The emission factors shown in Table 4.27 are taken from Compilation of Air Pollutant Emission Factors (Reference 9) for commercial vessels. They are weighted between hoteling and cruising modes in a 14:86 ratio for residual fuel and a 23:77 ratio for distillate fuel. These ratios are based on calculations of fuel consumed inport versus underway. The SO_x emission factors in Table 4.27 for diesel and residual powered vessels account for the sulfur content of these fuels. The diesel factor includes a sulfur content of 0.2% from AP-42 (Reference 9). The residual factor includes a sulfur content of 3% based on the assumption that this grade of fuel would be used since its cost is much less than the cost of low sulfur residual oil.

Emission factors obtained from Compilation of Air Pollutant Emission Factors (Reference 9) for gasoline recreational vessels were weighted 5% for inboard vessels and 95% for outboard vessels based on information from PennDER (Reference 29).

County-level TSP and SO_x emissions from vessels are summarized in Table 4.28.

Allocation

Allocation was made in proportion to linear miles of navigable river within each grid. Size of harbor and dock space was considered in order to account for inport emissions. For the less important category of recreational vessels, a simpler process of allocation was applied. Each grid that contained any portion of a river or lake used for recreational purposes was allocated an equal share of recreational vessel emissions.

Chester County borders neither the Delaware Bay nor the Delaware River. Consequently, no commercial vessel emissions were assigned to that county.

TABLE 4.25

NEW JERSEY COUNTY MOTORBOAT POPULATION (1977)

County	Size		Total	Gasoline	
	21 ft. and Less	Over 21 ft.		Inboard	Outboard
Burlington	2,838	97	2,935	24	2,886
Camden	523	97	620	24	572
Gloucester	800	0	800	0	800

Source: Survey of New Jersey's Registered Motorboat Fleet (Reference 30).

TABLE 4.26

ANNUAL GASOLINE CONSUMPTION OF MOTORBOATS
(gallons)

County	1982
Bucks	775,962
Chester	246,898
Delaware	330,116
Montgomery	615,323
Philadelphia	437,407
Burlington	324,949
Camden	68,157
Gloucester	90,638

TABLE 4.27

WEIGHTED VESSEL EMISSION FACTORS

Vessels	Emission Factors	
	TSP	SO_x
Commercial Vessels[a]		
Diesel	150	284.0
Residual	186	4770.0
Recreational Vessels[b]		
Gasoline	---	6.4

[a] lbs/10^4 gallons burned.
[b] lbs/10^3 gallons burned.

Source: Compilation of Air Pollutant Emission Factors (Reference 9), Tables 3.2.3-2, 3.2.3-5, and 3.2.4-1.

TABLE 4.28

1982 VESSEL EMISSIONS (tpy)

County	Commercial		Recreational	
	TSP	SO_x	TSP	SO_x
Bucks	4	106	---	2
Chester	---	---	---	1
Delaware	47	1,121	---	1
Montgomery	---	---	---	2
Philadelphia	119	2,846	---	1
Burlington	30	731	---	1
Camden	71	1,699	---	---
Gloucester	77	1,824	---	---

8. RAILROADS

Emissions from this category come from locomotive engine use, either for transportation or during switching operations. Because of the varying sources of data, railroad activity was determined separately for each state. The New Jersey SIP provided activity levels (gallons of diesel fuel used) through back calculation of emissions data. Its data source was the Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 1) which allocated state fuel totals down to the county level. The Pennsylvania Public Utility Commission in its Annual Report of Railroads 1975-1976 (Reference 31) provided estimates of fuel consumed by railroad operations.

Projections

New Jersey railroad activity projections were taken directly from the New Jersey SIP. Its figures were based on information provided by the New Jersey Department of Transportation.

The Pennsylvania SIP provided a growth factor which was specific to the five-county southeast Pennsylvania area. The growth factor for 1976-1982 is 1.0232. It is based on employment levels of locomotive engineers and engineer helpers in Pennsylvania Occupational Projections (Reference 32).

Emission Factors

Emission factors were taken from Compilation of Air Pollutant Emission Factors (Reference 9). These emission factors, which are based on national statistics, are listed in Table 4.29.

County-level TSP and SO_x emissions from railroad locomotives are listed in Table 4.30.

Allocation

Allocation was by railroad track-miles as determined from U.S.G.S. quadrangle maps. Depending upon the geographical area, emissions were reduced or completely eliminated to account for electrified tracks. Switching yards were allocated higher emissions because of the greater density of locomotives in these areas.

9. FOREST FIRES

The state departments of forestry were able to provide 1978-1979 data on acres consumed by wildfires in each county. A fuel loading of 11 tons/acre was assumed, as suggested in Compilation of Air Pollutant Emission Factors (Reference 9).

TABLE 4.29

RAIL LOCOMOTIVE EMISSION FACTORS

Pollutant	Average Emission Factor (lbs/10^4 gal)
TSP	250
SO_x	570

Source: Compilation of Air Pollutant Emission Factors (Reference 9), Table 3.2.2-1.

TABLE 4.30

1982 RAILROAD LOCOMOTIVE EMISSIONS (tpy)

County	TSP	SO_x
Bucks	75	171
Chester	50	114
Delaware	102	233
Montgomery	96	219
Philadelphia	295	673
Burlington	32	73
Camden	47	107
Gloucester	19	43

Projections

The method of projection differed in each state because of the differences in available data. The New Jersey Bureau of Forestry provided data for 1982. Projection data were not available from Pennsylvania. Therefore, it was assumed that forest wildfires would remain unchanged.

Emission Factors

The emission factor for TSP, 17 pounds per ton of material burned, was taken directly from the Aerometric and Emissions Reporting System (Reference 33). Little if any sulfur is contained in the material burned and thus there is no SO_x emission factor.

Forest fire TSP emissions are listed in Table 4.31.

Allocation

Allocation was made to all grids containing forest land. The amount of forest per grid was estimated using both maps from the U.S.G.S. and from The Timber Resources of Pennsylvania (Reference 34) and The Timber Resources of New Jersey (Reference 35).

10. AGRICULTURAL BURNING

Agricultural burning and record-keeping practices differed in each state. NJDEP provided permit data on three types of agricultural burning: infested plants, herbaceous material (asparagus field burning), and orchard prunings. Based on conversations with NJDEP agricultural officials, the following assumptions were made in order to calculate tons of material burned of each type:

- Five cords of wood per orchard pruning permit
- Ten acres of land per herbaceous material permit
- One ton of material per infested plant permit

The tons of each type of material burned were added in order to obtain the category activity parameter.

No data were available on agricultural burning in Pennsylvania. PennDER officials revealed that burning is unregulated. In order to arrive at an estimate, the following proportional relationship was assumed:

$$\frac{\text{Tons of Agricultural Material Burned in New Jersey}}{\text{Acres of Cropland in New Jersey}} \times \text{Acres of Cropland in Each Pennsylvania County} = \text{Tons of Material Burned in Each Pennsylvania County}$$

AMS personnel indicated that no agricultural burning of any kind is conducted in Philadelphia County.

TABLE 4.31

1982 FOREST FIRE EMISSIONS (tpy)

County	TSP
Bucks	---
Chester	3
Delaware	1
Montgomery	1
Philadelphia	---
Burlington	243
Camden	121
Gloucester	58

Projections

Projections of agricultural burning were made using the same compound growth factors developed for agricultural fuel use.

Emission Factors

Emission factors were derived for the New Jersey Counties from the Compilation of Air Pollutant Emission Factors (Reference 9). Factors for asparagus field burning were taken directly from AP-42. Factors for unspecified field crops were assumed to apply to infested plant burning. Emission factors for pear waste burning were applied to the orchard pruning category. Pear waste burning emission factors represent an average value of the orchard pruning emission factors. The Pennsylvania emission factor came from the unspecified agricultural burning category in Compilation of Air Pollutant Emission Factors (Reference 9). The emission factors for TSP are shown in Table 4.32. As was the case with forest material, agricultural waste contains no sulfur and as a result there is no SO_x emission factor. In New Jersey, emission factors were weighted according to the relative amounts of each type of burning.

County-level agricultural burning emissions of TSP are listed in Table 4.33.

Allocation

Allocation was made to cropland in all counties. This was estimated from U.S.G.S. quadrangle maps and conversations with local agricultural officials.

11. PRESCRIBED BURNING

This category includes the deliberate burning of fields or other areas for clearing purposes. Local forestry officials from the states of Pennsylvania and New Jersey were able to provide information on amounts of burning.

Pennsylvania officials provided estimates of total acres burned. They stated that most burning was for purposes of clearing brush from railroad beds. In addition, they estimated the percentage of burning in each county as follows: Bucks County, 10%; Chester County, 70%; Delaware County, 10%; and Montgomery County, 10%. A fuel loading factor for unspecified forest residue of 70 tons/acre was selected from Compilation of Air Pollutant Emission Factors (Reference 9) Table 2.4-2. This figure was found from the unspecified forest residue category of fuel loading factors.

New Jersey officials provided data on tons of material burned by county. Most of this material was brush clearing for five zone buffers in Burlington County, which contains large areas of pine forest.

TABLE 4.32

AGRICULTURAL BURNING EMISSION FACTORS

State	Types of Burning	TSP Emission Factors (lbs/ton)
New Jersey	Herbaceous	40
New Jersey	Infested	21
New Jersey	Orchard	9
Pennsylvania	Unspecified	21

Source: Developed from information in Compilation of Air Pollutant Emission Factors (Reference 9), Table 2.4-2.

TABLE 4.33

1982 AGRICULTURAL BURNING EMISSIONS (tpy)

County	TSP
Bucks	5
Chester	7
Delaware	1
Montgomery	3
Philadelphia	---
Burlington	2
Camden	---
Gloucester	5

Projections

The data for 1982 were assumed to be the same as base year data in Pennsylvania, as per local officials. In New Jersey, forestry officials provided projection year data.

Emission Factors

The TSP emission factor of 17 for unspecified forest residue (lbs/ton of material burned) was taken directly from Compilation of Air Pollutant Emission Factors (Reference 9) Table 2.4-2.

County-level prescribed burning emissions for TSP are listed in Table 4.34.

Allocation

In New Jersey, allocation to subcounty grids was based on the percent of forest acreage within the grid relative to the county. Because of the nature of the data provided by Pennsylvania officials, prescribed burning was allocated to grids in proportion to railroad track length. These data were acquired from U.S.G.S. quadrangle maps.

12. ON-SITE INCINERATION

In the Philadelphia area, incinerators may be classified as industrial or commercial. All incinerators in the Pennsylvania section of the study area are registered and, therefore, are listed in the point source inventory. For New Jersey, a previous study entitled New Jersey Area Source VOC and NO_x Emissions Inventory for Selected Counties and Categories (Reference 12) was used. In this study, average waste factors per employee classification were developed from NJDEP records and four-digit SIC employment information from County Business Patterns 1976 New Jersey (Reference 36). Specifically, the following two ratios were used: 0.2149 tons per commercial employee for commercial waste and 0.0706 tons per hospital employee for pathological waste.

Projections

New Jersey, which is the only state with emissions for this category, requires that all new incinerators be registered; therefore, all new emissions are covered in the point source projection. The emissions for this category represent unregistered incinerators; any increases in loading of these units would be offset by the possibility of another such incinerator ceasing operation.

Emission Factors

Table 4.35 shows the emission factors used for incinerators. They were taken from Compilation of Air Pollutant Emission Factors (Reference 9).

TABLE 4.34

1982 PRESCRIBED BURNING EMISSIONS (tpy)

County	TSP
Bucks	4
Chester	6
Delaware	1
Montgomery	1
Philadelphia	---
Burlington	257
Camden	---
Gloucester	4

TABLE 4.35

INCINERATOR EMISSION FACTORS

Pollutant	Emission Factor (lbs/10^2 ton burned)
TSP	700
SO_x	250

Source: Compilation of Air Pollutant Emission Factors (Reference 9), Table 2.1-1.

County-level TSP and SO_x emissions from on-site incineration are listed in Table 4.36.

Allocation

Allocation for this category was made in accordance with commercial employment since specific incinerator locations were unavailable.

13. STRUCTURAL FIRES

In neither of the states in the study area is there a centralized system of reporting fires to any state department or agency. The New Jersey Statewide Arson Network System Newsletter - July 1976 (Reference 37) and the New Jersey Statewide Arson Network System Newsletter - July 1978 (Reference 38) were examined to determine the number of fires occurring in residences, mercantile establishments, and industrial structures. The number of fires that occurred were tabulated for each New Jersey county.

In order to obtain Pennsylvania data, the fire marshall for each county was contacted. Each fire marshall provided data for 1978-1979 regarding the nature of the fire alarms to which their respective fire companies responded. Based on these records and subsequent conversations with each fire marshall, the number of structural fires was determined. Activity parameters are shown in Table 4.37.

Projections

The number of structural fires were projected by population. Due to the non-residential nature of some fires, this allocation parameter was thought to be slightly better than the number of dwelling units.

Emission Factors

Compilation of Air Pollutant Emission Factors (Reference 9) does not specifically address structural fire emission factors. The emission factors in Table 4.38 were acquired from the Aerometric and Emissions Reporting System (Reference 33) and were used for the calculation of structural fire emissions.

County-level TSP and SO_x emissions from structural fires are summarized in Table 4.39.

Allocation

Allocation was by dwelling units for all counties.

14. AGRICULTURAL EQUIPMENT

This source category includes farm vehicles which consume either gasoline or diesel fuel. Since data sources varied, activity levels for this category within each state were computed independently.

TABLE 4.36

1982 ON-SITE INCINERATION EMISSIONS (tpy)

County	TSP	SO_x
Burlington	9	3
Camden	30	11
Gloucester	2	1

TABLE 4.37

NUMBER OF STRUCTURAL FIRES BY COUNTY

County	1982
Burlington	1,399
Camden	991
Gloucester	223
Bucks	1,023
Chester	3,518
Delaware	2,974
Montgomery	3,940
Philadelphia	7,356

TABLE 4.38

EMISSION FACTORS USED FOR STRUCTURAL FIRES

Pollutant	Emission Factor (lbs/fire)
TSP	143
SO_x	0.4

Source: Aerometric and Emissions Reporting System (Reference 33).

TABLE 4.39

1982 STRUCTURAL FIRE EMISSIONS (tpy)

County	TSP	SO_x
Bucks	73	---
Chester	252	1
Delaware	213	1
Montgomery	282	1
Philadelphia	526	1
Burlington	100	---
Camden	71	---
Gloucester	16	---

To calculate farm tractor emissions in New Jersey, an annual average fuel use per tractor was determined. This was computed by taking the gallons of gasoline used on farms from the Highway Statistics 1974 (Reference 8) and the number of tractors from the 1974 Census of Agriculture New Jersey, Preliminary Report (Reference 11). From data in New Jersey Area Source VOC and NO_x Emissions Inventory for Selected Counties and Categories (Reference 12) it was assumed that 60% of the tractors in the state are gasoline, thus arriving at the number of gasoline tractors in the state and an annual average gasoline use of 427 gallons per tractor. The annual quantity of gasoline and diesel used per county was computed using the number of tractors by county and the knowledge that 60% of the tractors are gasoline and 40% diesel with each one consuming an average of 427 gallons per year.

For the Pennsylvania Counties, the type and number of farm vehicles were obtained from the 1974 Census of Agriculture Pennsylvania (Reference 13). Combining this number with average annual consumption figures from the Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 5), an estimate of the total number of gallons used for both gasoline and diesel vehicles was calculated. Table 4.40 shows the type of fuel used by the equipment inventoried.

Category emissions were assumed to be negligible in Philadelphia County.

Projections

Fuel use data were linearly extrapolated to 1982 using historical changes in cropland taken from 1974 Census of Agriculture documents (References 11 and 13) for each state. Fuel use for 1982 was calculated with compound growth factors developed from the change in acres of harvested cropland in each county as reported in the 1978 and 1969 censuses of agriculture.

Emission Factors

Farm equipment emission factors are shown in Table 4.41 for both gasoline and diesel-fueled equipment. Emission factors for non-tractor categories were developed from Compilation of Air Pollutant Emission Factors (Reference 9) by weighting the emission factor for each equipment type against the relative percent use for all types of equipment as shown in Table 4.40. For purposes of input to the emission factor file, a weighted emission factor was then calculated in the same manner for the tractor and non-tractor classifications separately for diesel and gasoline categories.

County-level agricultural equipment TSP and SO_x emissions are shown in Table 4.42.

Allocation

Allocation was made to the existing cropland per grid. These data came from U.S.G.S. quadrangle maps and communications with local officials who provided supplemental maps.

TABLE 4.40

FARM MACHINERY USAGE DATA

Type of Machinery	Annual Use (hrs/yr)	Diesel Fuel (%)	Gasoline (%)	Population[b] (10^5 units)
Tractors	*	30[a]	65	45
Combines	71	43	57	**
Balers	24	---	100	6.55
Harvesters	120	100	---	2.95
General Purpose	50	50	50	12.05

* 490 hr/yr diesel, 291 hr/yr gasoline.
** $5.06(10)^5$ gasoline, $2.17(10)^5$ diesel.
a About 5% is liquid petroleum gas.
b Compilation of Air Pollutant Emission Factors (Reference 9), Table 3.2.6-1.

Source: Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 5).

TABLE 4.41

AGRICULTURAL EQUIPMENT EMISSION FACTORS

Pollutant	Combined Gasoline Equipment Use (lbs/10^3 gal)	Combined Diesel Equipment Use (lbs/10^3 gal)
Particulates	7.74	47.3
SO_x	5.30	31.2

Source: Compilation of Air Pollutant Emission Factors (Reference 9), Table 3.2.6-2.

TABLE 4.42

1982 AGRICULTURAL EQUIPMENT EMISSIONS (tpy)

County	TSP	SO_x
Bucks	5	4
Chester	12	8
Delaware	---	---
Montgomery	3	2
Philadelphia	---	---
Burlington	3	2
Camden	1	0
Gloucester	3	1

15. AGRICULTURAL TILLING ACTIVITY

This source category, applicable to particulates only, includes emissions of fugitive dust resulting from agricultural tilling, plowing, and cultivating of the land. The amount of the emission depends upon the acreage harvested, the number of tilling operations performed, the silt content of the soil, and the surface soil moisture.

The 1977 Crop and Livestock Annual Summary (Reference 42) and the New Jersey Agricultural Statistics 1978 (Reference 43) were provided by the Pennsylvania Crop Reporting Service and the New Jersey Crop Reporting Service, respectively. These publications contain detailed county information on acreage farmed and crop production levels for the types of crops grown. The number of tillings for each crop represents the average number of times the acreage devoted to that crop was distributed sufficiently to produce wind erosion potential. Values less than one indicate either sporadic seed-bed establishment for perennial grasses or the increasing practice of no-till especially prevalent with corn. In the case of tobacco, a rough estimate of once-a-month tilling during the summer half-year was used for fields under continuous hand cultivation. This data, also given in matrix form, is shown in Table 4.43. The annual number of acres tilled by county was obtained by multiplying and summing the acres harvested and tillings per year. The result of these calculations is also shown in Table 4.43.

Projections

The 1982 emissions resulting from agricultural tilling activity were determined from projections of agricultural employment by county as contained in Reference 41.

Emission Factors

The emission factor equation for particulate emissions from agricultural tilling was obtained from the Compilation of Air Pollutant Emission Factors (Reference 9). A silt content of 30% and a Thornwaite precipitation-evaporation index of 120 were used in the equation to reflect conditions in Philadelphia. An emission factor of 7.3 lb/tilling-acre was determined.

County-level agricultural tilling TSP emissions are shown in Table 4.44.

Allocation

Allocation to grid cells was made according to the number of agricultural employees.

16. UNPAVED ROADS

This source category includes dust emissions generated by vehicles traveling on unpaved road surfaces. The amount of the particulate emission depends upon the quantity of vehicular traffic, vehicle speed and weight, and the road surface silt content. Vehicular traffic data and unpaved road mileage on the

TABLE 4.43

1977 TILLING ACTIVITY DATA

County	Crops: Acres Harvested (10^3)								Crops: Tillings Per Year								Tilling-Acres Per Year (10^3)
	Wheat	Oats	Barley	Corn	Hay	Pots.	Tobacco	Vegs.	Wheat	Oats	Barley	Corn	Hay	Pots.	Tobacco	Vegs.	
Bucks	8.7	2.8	6.3	37.4	19.0	0.3	--	2.4	--	--	--	0.5	0.5	3.0	--	3.0	36.3
Chester	6.6	2.4	4.1	61.1	43.0	0.9	0.3	1.4	--	--	--	0.5	0.5	3.0	6.0	3.0	60.8
Delaware	0.3	0.2	0.2	3.8	1.0	--	--	0.3	--	--	--	0.5	0.5	--	--	3.0	3.3
Montgomery	5.1	1.6	2.3	24.6	13.0	--	--	0.5	--	--	--	0.5	0.5	--	--	3.0	20.3
Philadelphia	--	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Burlington	4.3	--	2.6	19.7	8.6	--	--	5.1	--	--	--	0.5	0.5	--	--	3.0	29.5
Camden	--	--	--	0.9	0.6	0.2	--	1.3	--	--	--	0.5	0.5	3.0	--	3.0	5.3
Gloucester	1.9	--	2.1	5.8	2.7	0.8	--	8.9	--	--	--	0.5	0.5	3.0	--	3.0	33.4

TABLE 4.44

1982 AGRICULTURAL TILLING EMISSIONS (tpy)

County	TSP
Bucks	132
Chester	222
Delaware	12
Montgomery	74
Philadelphia	---
Burlington	108
Camden	19
Gloucester	122

state-maintained road system were obtained for Pennsyvania from the Pennsylvania Department of Transportation (PennDOT) (Reference 44) and for New Jersey from the New Jersey Bureau of Data Resources (Reference 45). Table 4.45 lists the unpaved road mileage on both state and municipal road systems by two road types: graded and drained earth or cinders (Type 1) and stone, gravel, or shale (Type 2). In New Jersey a very small mileage of unimproved roadways is included in Type 1. ES estimates the silt content of Type 1 roads to have an average value of 20% and Type 2 roads to have a 12% silt content. Type 1 road mileages in Table 4.45 were adjusted to account for this difference in silt content. That is, the mileage was multiplied by 20/12 to obtain the equivalent distance on 12% silt roads.

Average daily traffic (ADT) data on unpaved roads was not available. However, based on conversations with PennDOT engineers, PennDOT usually paves a road if the ADT exceeds 25 vehicles per day. Using an estimated average ADT of 15, together with the other information contained in Table 4.45, the annual vehicle-miles traveled (VMT) on unpaved roads was calculated for each county. New Jersey DOT estimated a maximum of 100 ADT on unpaved roads. However in order to be consistent with the Pennsylvania data, an ADT of 15 was used to calculate the information in Table 4.45 for the New Jersey counties.

Projections

The 1982 emissions resulting from unpaved roads were considered to be constant based on conversations with PennDOT engineers.

Emission Factors

The TSP emission factor for unpaved roads was taken from Compilation of Air Pollutant Emission Factors (Reference 9). The resulting annual emission factor of 3.85 lb/vehicle-mile accounted for a silt content of road surface material of 12%, an average vehicle speed of 30 miles per hour, and a mean annual number of days with 0.01 inches or more of rainfall of 124.

County-level TSP emissions for vehicle travel on unpaved roads are included in Table 4.45.

Allocation

The Pennsylvania and New Jersey unpaved road mileage was available by minor civil division (MCD). Allocation was made by assuming uniformity of road mileage within each MCD and assigning mileage on the basis of the area of each grid cell within the MCD.

17. UNPAVED AIRSTRIPS

This source category includes fugitive particulate emissions generated by aircraft take-off, landing, and taxiing on unpaved airstrips. The amount of emissions depends upon the take-off, landing, and taxi distances; the type of runway surfaces; and the total number of LTO cycles. Data concerning the

TABLE 4.45

1982 UNPAVED ROAD DATA BY COUNTY

County	Type 1 Road Mileage Actual	Type 1 Road Mileage Adjusted[a]	Type 2 Road Mileage	Estimated Average ADT	Annual VMT (10^3)	Annual TSP Emissions (tons/year)
Bucks	50.23	83.72	287.52	15	2,032	3,912
Chester	58.02	96.70	176.96	15	1,498	2,884
Delaware	1.00	1.67	18.20	15	109	210
Montgomery	52.51	87.52	77.08	15	901	1,734
Philadelphia	4.33	7.22	1.43	15	47	90
Burlington	143.15	238.58	31.07	15	1,476	2,841
Camden	18.83	31.38	2.42	15	185	356
Gloucester	35.40	59.00	1.04	15	329	633

[a] Type 1 mileage multiplied by 20/12 to account for greater average silt content.

runway length and surface of all airstrips in the Delaware Valley Aviation Planning Region were provided in Reference 23. This was used to identify the unpaved airstrips considered here.

LTO cycles at each airport with only an unpaved runway presented no problem. However, partitioning was necessary in cases where there was a paved as well as an unpaved runway. Using the annual wind direction frequency at Philadelphia International Airport found in Summary of Hourly Observations (Reference 46) and the airstrip directional orientations, it was decided that the paved runway would accommodate approximately 55% of the total aircraft LTOs and the unpaved, 45%. Table 4.46 shows the LTO cycles at unpaved airstrips for each county.

Projections

The 1982 emissions resulting from aircraft operations on unpaved runways were determined from the expected growth rate of aircraft operations at airports in the Philadelphia area as contained in Reference 23.

Emission Factors

The TSP emission factor for unpaved airstrips is derived from the unpaved road emission factor. The only modification is an adjustment for LTO cycles. The resulting emission factor is 1.93 lbs/LTO.

Table 4.47 presents the 1982 TSP emissions by county.

Allocation

The emissions from each airport were assigned to the grid cell in which the airport was located.

TABLE 4.46

UNPAVED AIRSTRIP DATA BY COUNTY

County	Airstrip	LTO Cycles 1976	LTO Cycles 1982
Bucks	Van Sant	53,447	65,312
	Warrington	9,603	12,229
Chester	New London	987	1,206
	Oxford	1,444	1,765
	The New Garden Flying Field	6,543	8,019
	West Chester	14,540	17,778
Montgomery	Butter Valley	2,889	3,530
	New Hanover	4,863	5,948
	Pottstown Limerick	6,966	8,583
	Pottstown Municipal	9,511	11,763
	Turner	17,373	21,318
Gloucester	Pitman	5,497	6,717

TABLE 4.47

1982 UNPAVED AIRSTRIP EMISSIONS (tpy)

County	TSP
Bucks	75
Chester	28
Montgomery	49
Gloucester	6

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SECTION 5

PARTICLE SIZE, SULFATE, AND SULFUR DIOXIDE FACTORS

INTRODUCTION

This section delineates the procedures used to develop the pollutant profiles for emissions from sources in the Philadelphia AQCR. These pollutant profiles are in the form of emission or other factors for application to the point source, IPFPE, area source, and highway vehicle inventories discussed in previous sections of this report. The emission inventories provide data for particulates and sulfur oxides. In order to utilize these inventories in the particle model, a transformation of the data to the requisite four categories of pollutants was necessary. These four pollutant categories are:

- Particles less than or equal to 2.5 micrometers
- Particles greater than 2.5 micrometers and less than or equal to 10 micrometers
- Primary sulfates in the same two particle size classes
- Sulfur dioxide

These categories were generated for every source in the inventory by applying four sets of factors (one for each pollutant category) to each source or source category by NEDS Source Classification Code (SCC). The factors were developed from stack tests conducted by ES in Philadelphia as part of this study, other previous source test results, and any available research documents. The ES tests provided information on particle size for specific sources in the Philadelphia AQCR. These data were discussed in Section 2. None of the other data reviewed included sources in the AQCR. All pollutant factors based on these data were developed according to SCC. The pollutant factor files used in generating emission inputs for the urban particle model are provided in Appendix F. Pollutant factors are included in the file for each emission point or SCC that has at least one ton per year of particulate or SO_x emissions.

DATA SOURCES

During the middle and latter part of 1982, several sources of data were investigated in an attempt to locate previously conducted stack tests or summaries of tests. The following summarizes for each potential data source the available information associated with the more significant source categories in the Philadelphia area. The highway vehicle category is discussed in a subsequent part of this section.

Fine Particle Emissions Information System (FPEIS)

The FPEIS provided sizing data for 2.5 and 10 micrometer particles for the following types of sources:

- Process Heaters - Gas
- CO Boiler
- Rotary Calciner
- Distillate Oil Combustion - Industrial
- Residual Oil Combustion - Industrial and Utility
- Glass Furnace
- Asphalt Plant
- Cement Plant - Dry Process
- Steel Foundry Shakeout

Source Test Data System (SOTDAT)

The data contained in SOTDAT was found to be inappropriate for inclusion in this study.

Compilation of Air Pollutant Emission Factors, AP-42

Emission factors for sulfur dioxide were available for the following source categories:

- Bituminous Coal Combustion: pulverized >100 MMBtu/hr
  stokers 10-100 MMBtu/hr
- Petroleum Refining: process heaters - oil
- Residual Oil Combustion: utility
  industrial
  commercial
- Distillate Oil Combustion: utility
  industrial
  commercial

Emission Measurements Branch (EMB), EPA Emission Standards and Engineering Division (ESED)

The stack test report files of EMB contain numerous reports with sulfur dioxide emissions data. However, no data was extracted from these reports because of the large expenditure in resources which would be required. EMB particle size and sulfate data were obtained from other sources listed in this documentation.

EPA Industrial Environmental Research Laboratory (IERL)

Test reports from a program directed by Dale Harmon of IERL to determine inhalable particulate emissions from industrial sources were reviewed. These

reports presented 2.5 and 10 micrometer particle emissions from the following source catgories:

- o Asphalt Plants
- o Dry Process Cement Plants
- o Stone Screening and Conveying

EPA Environmental Science Research Laboratory (ESRL)

A review of ESRL stack test reports provided data on sulfate emissions. The sources for which this data was available were:

- o Pulverized Coal Boilers with ESP
- o Municipal Incinerators

EPA Monitoring and Data Analysis Division (MDAD)

The test reports at MDAD were found to be identical to those available from IERL and ESED.

Midwest Research Institute Report Entitled "Particulate Pollutant System Study, Volume II - Fine Particle Emissions"

The MRI report summarized particle sizing tests conducted on a variety of sources. Since the tests were somewhat dated only those source categories which could not be found elsewhere were included. These categories were:

- o Fluid Catalytic Cracking Units
- o Municipal Incinerators

GCA Corporation Report Entitled "Development of Size-Specific Emission Factors"

The GCA report compiled inhalable and fine particulate emissions for many source categories. The data was primarily extracted from an older version of the FPEIS. None of the data which were used in this report are currently contained in the FPEIS. Since the report presented emissions data for 2.5 and 10 micrometers particles for many source types not found elsewhere, data was extracted for the following:

- o Bituminous Coal Combustion: pulverized >100 MMBtu/hr
  stokers 10-100 MMBtu/hr
- o Steel Production: electric arc
  open hearth
- o Cement Plants: dry process
  wet process
- o Asphalt Plants
- o Lime Kilns

- o Potash Dryer
- o Salt Dryer
- o Urea Prill Tower
- o Copper Smelter
- o Metallurgical Coke: oven pushing

State and Local Agencies

Interviews by ES and EPA with personnel in the agencies in the Philadelphia AQCR indicated that there was no emissions data available which would be useful in this study.

Electric Power Research Institute Report Entitled "Emissions Inventory for the SURE Region"

EPRI sponsored an air pollution study called the Sulfate Regional Experiment (SURE) in an attempt to correlate ambient levels of sulfur dioxide and sulfates to source emissions. As part of the study, sulfate and sulfur dioxide speciation factors were assigned to all point source categories by SCC. These factors are less specific than those available from other data sources and were applied to categories for which no other information was available. These source categories for which either sulfate or sulfur dioxide factors (or both) were applied include:

- o Bituminous Coal Combustion: pulverized >100 MMBtu/hr
  stokers 10-100 MMBtu/hr
- o Steel Production: electric arc
- o Cement Plants: wet process
- o Asphalt Plants
- o Petroleum Refining: CO boiler
  fluid coking
- o Residual Oil Combustion: utility
- o Residual Oil Combustion: industrial
- o Inorganic Pigment Digester
- o Distillate Oil Combustion: utility
- o Distillate Oil Combustion: industrial
- o Rotary Calciner

- Direct Fired Glass Furnace
- Coke Boiler
- PVC/Copolymer Manufacturing Fugitives

Environment Canada Report Entitled "Anthropogenic Sources and Emissions of Primary Sulphates in Canada"

This report identified major anthropogenic sources of primary sulfates in Canada and determined emission factors for both the total and the acidic fraction of the sulfates from each source category. The total sulfate data were used to develop factors for the following sources:

- Steel Production: open hearth furnace
- Metallurgical Coke: oven pushing
  oven door leaks
- Sulfuric Acid Absorber
- Cement Plants: dry process
- Petroleum Refining: process heaters - oil and gas
  fluid catalytic cracking
- Residual Oil Combustion: utility
  industrial
  commercial
- Distillate Oil Combustion: utility
  industrial
  commercial

PEDCo Environmental Report Entitled "Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions"

This report presents emission factors and particle size data for a variety of fugitive particulate emission sources. Those sources applicable to this study included:

- Lime and Aggregate Storage Piles
- Ship Grain Loading
- Secondary Aluminum Production Fugitives

Mitre Corporation Report Entitled "Coke Oven Charging Emission Control Test Program - Volume II Supporting Appendices"

This report provided percent by weight data for particle size emissions from coke oven door leaks.

Report by R.C. McCrillis Entitled "Analysis of the Brass and Bronze Industry"

This report presented particle size data for the brass and bronze industry. Data for weight percent less than 2.5 and 10 micrometers was interpolated from a set of data for a brass furnace.

Report by V.H. Baldwin and C.W. Westbrook Entitled "Environmental Assessment of Melting, Pouring, and Innoculation in Iron Foundries"

This report presented 1.0, 3.0, and 10 micrometer particle emissions from several operations at iron foundries. Those utilized for Philadelphia sources are shown below:

- Grey Iron Foundries: pouring
  innoculation

Report by C. Cowherd, R. Bohn, and T. Cascino Entitled "Iron and Steel Plant Open Source Fugitive Emission Evaluation"

This report presented particle size data on emissions less than 10 micrometers and less than 30 micrometers. This data was utilized for the source categories listed below:

- Unpaved Roads
- Coal Storage Piles

Report by KVB Engineering, Inc., Entitled "Fine Particle Emissions From Stationary and Miscellaneous Sources in the South Coast Air Basin"

Both point and area source particle size data were included in this report. The point source data, however, were included in FPEIS and as a result, this reference was used for area source particle size information. In general, 1.0, 3.0, and 10.0 micrometers were the particle size cutoffs and interpolation was necessary to obtain the 2.5 percentage. The following categories were included in the report:

- Structural fires
- Residential natural gas
- Fireplaces
- Unpaved roads
- Construction dust
- Agricultural burning
- Forest fires
- Agricultural tilling
- Internal combustion engine - diesel
- Internal combustion engine - digester gas

POINT AND INDUSTRIAL PROCESS FUGITIVE SOURCE FACTORS

A discussion of the development of the factors for each of the pollutant categories follows. The two ranges of particle size data are grouped together as a single category. The discussions are generally limited to those data sets which required some processing of the data, e.g., stack test reports, to arrive at the desired type of factor. Otherwise, the data were used as provided in the literature. Complete references are identified if more detailed examination of the procedures used by those authors is desired. Table 5.1 presents the point and industrial process fugitive factors for the more significant source categories. In cases that pollutant factors could not be obtained for a source or source category, factors for the most similar source or source category were entered into the file shown in Appendix F.

Particle Sizing Data

A majority of the particle sizing data was extracted from the current data base of the FPEIS. The following includes a description of the collection and calculation of weight percentage data for 2.5 and 10 micrometer particle sizes from FPEIS. One of the objectives of FPEIS was to present data in a standardized format. Therefore, most of the sources were evaluated by the same method. The discussion of this method describes the general steps to calculate the weight percents and then examines those steps used to calculate weight percents that were unique to each source. A discussion of source categories for which particle size information was obtained from data sources other than FPEIS is then presented.

General

The FPEIS printout is divided into a number of pages (Series Forms) that give specific information. The important Series Forms for the calculations are as follows:

Series Form	Type of Information
2	Control Device Data
C6	Calculated Particle Size Distribution
7	Sampler Stage Data

The weight percentages were calculated by the following procedure.

a. The stage weights were obtained from Series Form 7 and totaled in micrograms/DNm^3.

b. For 2.5 micrometers, the cumulative mass concentration (in micrograms/DNm^3) from Series Form C6 was divided by the total stage weight from (a) in micrograms/DNm^3 and multiplied by 100.

c. For 10 micrometers, the cumulative mass concentration for 2.5 micrometers (from Series Form C6) was subtracted from that for 10 micrometers.

TABLE 5.1

POLLUTANT FACTORS FOR URBAN PARTICLE MODEL

Source Category	SCC	Uncontrolled					Fabric Filter			ESP			Venturi Scrubber			
		lbs/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_2[5]/SCC	lbs SO_4[5]/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_4[5]/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_4[5]/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_2[5]/SCC	lbs SO_4[5]/SCC
Bituminous Coal Combustion																
Pulverized >100 MMBtu/hr		16A[6]	9.88	19.45	37.83S[11]	0.03[4]	30.0	34.0	0.0196[4]	37.0	39.0	0.0196[4]	74.0	12.0		
Stokers 10-100 MMBtu/hr		13A[6]	6.5	17.5	37.83S[11]	0.03[4]	23.0	38.0	0.0196[4]			0.0196[4]				0.0196[4]
Steel Production																
Electric Arc		22.5	53.0	20.0		0.02[4]	36.0	42.0								
Open Hearth		21.1	64.0	20.5		0.033[10]										
Cement Plants																
Dry Process		245	1.5	7.5		6.8[10]	16.1	49.5	0.012[10]	54.25	32.75	0.012[10]				
Wet Process		228	27.0	41.0		0.01[4]				95.0	4.1					
Asphalt Plants		45	10.7	16.6		0.05[4]	13.7	20.5					66.0	20.5		
Metallurgical Coke																
Oven Pushing		0.47	75.0	21.0	0.0255	0.02[4]							60.0	27.0		
Oven Door Leaks			98.3	1.7		0.02[4]										
Petroleum Refining																
Process Heaters																
Gas			7.8	20.3		0.01[4]										
Oil					149.2S[12]	0.375[8]										
Fluid Cat. Cracker			33.0	32.0	284.2[15]	0.175[8]						0.265[15]				
CO Boiler						0.03[4]				5.4	10.0					
Sulfur Recovery						0										
Fluid Coking						0.05[4]										
Residual Oil Combus.																
Utility			46.5	12.6	149.2S[12]	0.05[4]			0.024[4]	54.6	17.3	0.024[4]	74.9[2]	13.2[2]		
Industrial			33.2	22.3	149.2S[12]	0.05[4]			0.024[4]			0.024[4]				0.024[4]
Commercial					149.2S[12]	2.70S[8]										
Sulfuric Acid Absorber		3.3	58.6	41.3	329.2[14]	0.1[7]										
Inorganic Pigment Digester						0.01[4]										
Antimony Roasting					0.53[13]		49.5[16]	45.2[16]	0.022[13]							

TABLE 5.1--Continued

Source Category	SCC	Uncontrolled					Fabric Filter			ESP			Venturi Scrubber			
		lbs/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_2[5]/SCC	lbs SO_4[5]/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_4[5]/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_4[5]/SCC	% <2.5 μm	% <10 μm[1]	lbs SO_2[5]/SCC	lbs SO_4[5]/SCC
Distill. Oil Combus.																
Utility					134.9S[12]	0.05[4]			0.024[4]			0.024[4]				
Industrial			70.7	9.4	134.9S[12]	0.05[4]			0.024[4]			0.024[4]				
Commercial					134.9S[12]	1.14S[8]										0.024[4]
Rotary Calciner						0.03[4]	5.2	49.4	0.036[10]			0.036[10]				
Glass Furnace																
Direct Fired			84.5	5.5		0.05[4]				45.5	21.0					
Municipal Incinera.			19.6	10.4		9.25[3]						14.65[3]				
Coke Boiler			30.7	15.9		0.01[4]										
Stone Screening/ Conveying			15.0	34.0												
Secondary Copper/ Bronze Furnace			95.1	3.3												
Grey Iron Foundry																
Pouring			11.5	11.4												
Innoculation			59.2	20.9												
Steel Foundry Shakeout			58.3	10.8												
Secondary Aluminum Production Fugitives			100	0												
Unpaved Roads			16.0	24.0												
Coal Storage Piles			2.7	7.2												
Lime and Aggregate Storage Piles			28.0	14.0												
Ship Grain Loading			0	0.9												
PVC/Copolymer Mfg. Fugitives						0.01[4]										

1 Percent by weight less than or equal to 10 μm and greater than 2.5 μm.
2 Cyclone.
3 Percent by weight of flyash.
4 Sulfate/SO_x ratio.
5 S represents percent sulfur.
6 A represents percent ash.
7 lb/ton produced.
8 lb/1000 gallons.
9 lb/1000 barrels.
10 lb/ton.
11 97% of fuel sulfur emitted as SO_2.
12 95% of fuel sulfur emitted as SO_2.
13 Harshaw Chemical stack test results in lbs/hr.
14 Allied Chemical stack test results in lbs/hr.
15 BP Oil stack test results in lbs/hr.
16 Harshaw Chemical stack test results.

This result was divided by the total stage weight and multiplied by 100.

d. For controlled emissions, the control device data were collected from Series Form 2 and the values were calculated by following the procedures in (a), (b), and (c).

Residual Oil Combustion

Emissions data were collected from utility and industrial boilers burning residual oil. For utility boilers, results from four plants were averaged to get uncontrolled weight percents, from one plant to get ESP controlled, and from two plants to get cyclone controlled. For the uncontrolled tests, sampling was performed with two sampling systems: SASS train and 3 cyclones in series with a Method 5 train. Using the modified Method 5 train resulted in consistently lower values as compared to the SASS train. In computing the average weight percentages for uncontrolled emissions, the modified Method 5 results were ignored.

The values for the uncontrolled weight percentages varied from 6.8 to 17.1 (average 12.6%) and 35.2 to 66.1 (average 46.5%) for <10 micrometers and <2.5 micrometers, respectively. For cyclone controls the values were 10.1 to 16.3 (average 13.2%) and 70.4 to 79.2% (average 74.9%).

For industrial boilers, the same procedure was followed. Two test sites, both uncontrolled, provided results with the same two types of samplers. Weight percentage values for the SASS train tests were 18.5 to 25.3 (average 22.3%) and 31.3 and 40.6 (average 33.2%) for the 10 and 2.5 micrometer sizes, respectively.

Asphalt Plants

The weight percent figures for asphalt plants are the average of data collected from three test reports; two from FPEIS and an IERL report on a Bowen Construction Company plant. The uncontrolled data ranged from 6.2 to 26.5% (average 16.6%) for <10 micrometers and 0.8 to 26.3% (average 10.7%) for <2.5 micrometers. The controlled (baghouse) data were 18.9 to 22.0 (average 20.5%) for <10 micrometers and 12.0 to 15.3% (average 13.7%) for <2.5 micrometers.

Glass Furnaces

Data were collected from three plants. The same sampling configurations described in the section on residual oil combustion were used, and the modified Method 5 results were again ignored. Ranges of uncontrolled values were 2.9 to 8.1 (average 5.5%) and 80.0 to 88.9% (average 84.5%) for <10 and <2.5 micrometers, respectively.

The following discussions address those source categories for which particle size data were obtained from data sources other than FPEIS.

Coke Oven Door Leaks

Particle size emissions based on a percent by weight of total particulate emissions was determined for leaks from coke oven doors. The data was obtained from a July 1974 report by the Mitre Corporation entitled "Coke Oven Charging Emission Control Test Program - Volume II Supporting Appendices". The report presented the weight percent for various particle diameters. These data were plotted and the appropriate size ranges were selected from the graph. The resulting percent by weight emission factors for the less than 2.5 micrometer and the 2.5 to 10 micrometer particles were 98.3 and 1.7, respectively.

Lime and Aggregate Storage Piles

The particle size emissions data presented for lime and aggregate storage piles was obtained from a report by PEDCo Environmental, Inc., entitled "Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions". The report does not directly address the storage of lime but does discuss the storage of bulk materials such as coal, gypsum, gravel, clay, and sand. It is assumed that the fugitive emissions from a lime storage pile will be similar to these materials since the report states that the size distribution of particle emissions is independent of the material stored.

The particle size ranges for the emissions were provided as percent by weight for the less than 3 micrometer and the 3 to 30 micrometer particles. This data was plotted and the 10 micrometers particle emissions were read directly from the graph. The 2.5 micrometer particle emissions were determined by extrapolation of the data. The percent by weight emission factors were 28.0 and 14.0 for the less than 2.5 micrometer and the 2.5 to 10 micrometer particles, respectively.

Ship Grain Loading

The estimates for particle size emissions from ship grain loading were obtained from the report by PEDCo Environmental entitled "Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions". The report presents data for particle size distributions for elevator legs of country and terminal grain elevators. The emissions from ship grain loading were assumed to be similar.

The report presents cumulative weight percent data for several particle diameters ranging from 1 to 149 micrometers. These data were plotted and the appropriate particle diameters selected from the graph. It was assumed that there were no particles less than 2.5 micrometers since the cumulative weight percent of 99.9 for 1 micrometers was identical to the next largest diameter of 5 micrometers. The percent by weight emission factor for the 2.5 to 10 micrometer particles was 0.9.

Secondary Aluminum Production Fugitives

The particle size emissions data presented for this category were obtained from the PEDCo Environmental report identified for the last two source

categories. This report states that particulates from secondary aluminum production are less than 2 micrometers in size. Thus, the cumulative weight percents less than 2.5 micrometers and the 2.5 to 10.0 micrometer range are 100% and 0%, respectively.

Secondary Copper/Bronze Furnace

Data for this category were obtained from the report entitled "Analysis of the Brass and Bronze Industry". The report presents particle size distributions for a bronze furnace. Data for the cumulative weight percents less than 2.5 micrometers and the 2.5 to 10 micrometer range were interpolated by plotting the available data.

Grey Iron Foundry Pouring and Innoculation

Data for these two foundry fugitive emission sources were obtained from the report entitled "Environmental Assessment of Melting, Pouring, and Innoculation in Iron Foundries". The particle size distributions were presented as cumulative percent less than 1.0, 3.0, and 10.0 micrometers. The data were plotted and used to interpolate the values shown in Table 5.1.

Fugitive Emissions from Unpaved Roads and Coal Storage Piles

The particle size data utilized for these source categories were taken from the report "Iron and Steel Plant Open Source Fugitive Emission Evaluation". The data was presented as cumulative emissions less than 10.0 micrometers and less than 30.0 micrometers. The data were plotted and the 2.5 micrometer values extrapolated.

Primary Sulfates

Primary sulfate data were found for a variety of industrial processes. The sulfate factors developed from the data are for total sulfates which include sulfuric acid aerosol. Little of the data provided emission factors; the data were expressed as multipliers of the SO_2 values on a weight basis or as percent of flyash. No data were found on sulfate particle sizes. Because these particle sizes are thought to be in the lower end of the inhalable range, it will be assumed that all sulfate particles are less than 2.5 micrometers in diameter. The following paragraphs summarize the procedures used to calculate sulfate factors.

Industrial Boilers

Sulfate emissions data were collected for both oil- and coal-fired industrial boilers. One source of data was found for oil-fired boilers, and the $SO_4 = 0.091\ SO_2$ value was used in Table 5.1 (Reference 1). This value is the average of tests performed at five sites in North Carolina. Sulfate values ranged from 0.053 to 0.124 SO_2 with oil sulfur contents ranging from 0.2 to 2.0%.

For coal-fired industrial boilers, two sources of data were found (References 1 and 2). However, the data from Reference 2 appear abnormally low

for both industrial and utility boilers and were not considered in the calculations. The value used in the emissions chart was SO_4 = 0.027 SO_2 and was taken from tests performed at one site (Reference 1).

Reference 2 supplied both controlled and uncontrolled emission factors for particulate sulfates. The average values were 0.023 and 0.015 g/kg of coal fired for uncontrolled and controlled (ESP), respectively. These values show a 34.8% reduction by an ESP. Therefore, the value from Reference 1 (SO_4 = 0.027 SO_2) was reduced by 34.8% to yield the ESP controlled value of SO_4 = 0.017 SO_2.

Utility Boilers

Sulfate emissions data were collected for oil-fired utility boilers from References 1, 3, 4 and 5. Three emission values were collected: uncontrolled, controlled by gas recirculation, and controlled by ESP. The average uncontrolled emissions were SO_4 = 0.065 SO_2 with a range of 0.020 to 0.136 SO_2. One set of data provided information on SO_4 as a percentage of total particulate emissions. These values were 35% uncontrolled and 50% controlled (Reference 4).

The controlled values were taken from References 1 and 5. The gas recirculation value was SO_4 = 0.027 SO_2 which included H_2SO_4 = 0.022 SO_2 (Reference 5). The ESP controlled value was SO_4 = 0.031 SO_2 (Reference 1).

Coal-fired boiler emission values were taken from References 1, 2, 3, and 5. The uncontrolled value of SO_4 = 0.021 SO_2 resulted from the average of tests at six coal-fired boilers (Reference 1). The range of values was 0.009 to 0.035 SO_2. Again, the values reported in Reference 2 were neglected due to the very low results.

Three controlled emission values were obtained: control by cyclone, control by ESP, and control by Flue Gas Desulfurization (FGD). The cyclone control value of SO_4 = 0.019 SO_2 was collected from Reference 5. The value includes emissions of 0.013 SO_2 and 0.006 SO_2 for sulfuric acid and particulate sulfate, respectively.

The ESP controlled value (SO_4 = 0.0002 SO_2) was obtained by reducing the uncontrolled value (0.021 SO_2) by 98.97%. The reduction was calculated by the reduction in the emission factor (0.058 to 0.0006 g/kg coal feed) obtained from Reference 2.

The FGD unit is a 2-stage wet scrubber (particulate plus FGD). The average controlled sulfate factor was 0.065 SO_2.

Coke Ovens

Sulfuric acid levels from coke ovens were collected from charging and coking operations at the inlet and outlet to a charged-droplet scrubber. The average values for the operations were as follows:

Condition	H_2SO_4 Values	
	Inlet	Outlet
Charging	0.124 SO_2	0.110 SO_2
Coking	0.133 SO_2	0.036 SO_2

Municipal Incinerators

The flyash emissions from both refuse and sludge incinerators were analyzed for sulfates. The following represents the sulfate percent by weight content of the flyash. These values will be assumed to represent the sulfate emitted as a percent of total particulate emissions.

Incinerator Type/Control	Percent by Weight of Flyash
Refuse without Controls	9.25
Refuse with ESP	14.65
Sludge with Venturi Scrubber	12.12

Cement Plant

A sulfate emission factor was calculated for a dry process Portland cement plant with an ESP. The data for the calculations were obtained from a source characterization study conducted by ESRL. A mass emission rate for sulfates was calculated from an x-ray fluorescence analysis for each of six filter types used in the study. Using the kiln feed rate and a conversion factor of 3200 lbs of kiln feed to produce 2000 lbs of cement (AP-42) a production rate of 79 tons per hour was calculated. The production rate was then used to calculate an emission factor for each of the six filter types as lbs of sulfate per ton of cement produced. An average emission factor of 0.0021 was then determined using data from five of the six filters. The data from the glass fiber filter was not used because of the potential for sulfate artifact formation.

Sulfur Dioxide

Much of the published information on emissions of sulfur dioxide was found to be total oxides of sulfur expressed as sulfur dioxide. However, Reference 9 presented data on the percentage of fuel sulfur emitted as sulfur dioxide. Included were most of the major fuel combustion sources in the study area. Emission factors were developed which reflected the various percentages contained in the reference. Those source categories which emit 97% of the fuel sulfur as sulfur dioxide are:

- Residual Oil Combustion: utility
  industrial
  commercial
- Distillate Oil Combustion: utility
  industrial
  commercial

- Petroleum Refining: process heaters - oil

The sources which emit 95% of the fuel sulfur as sulfur dioxide are:

- Bituminous Coal Combustion: pulverized >100 MMBtu/hr
  stoker 10-100 MMBtu/hr

AREA SOURCE FACTORS

The data available for establishing area source particle sizing, primary sulfate and sulfur dioxide factors were discussed in the second topic of this section. Very little of the data actually pertains to area sources. When data were not available for a given area source category, pollutant factors for the most representative point source category were applied. Pollutant factors in Table 5.1, which are for the more significant point source categories, were used along with factors for less important point source categories not included in Table 5.1. Table 5.2 identifies the source category and reference (Table 5.1 or other data source) selected for each area source category.

HIGHWAY VEHICLE FACTORS

Procedures used by DVRPC to generate gridded hourly emissions for highway vehicles are described in Appendix C. Highway vehicle emissions consist of exhaust, tire wear, and reentrained road dust components. Each of the three components have particulate emissions while sulfate and sulfur dioxide are emitted only in the exhaust component. ES supplied DVRPC with emission factors to be used to generate emission rates for the pollutants required by the urban particle model. As indicated previously, no data on sulfate particle size was available and it was therefore assumed that all sulfate particles were less than 2.5 micrometers in diameter. The following paragraphs document the development of the emission factors supplied to DVRPC.

Particulate Factors

By far the largest component of highway vehicle particulate emissions is reentrained road dust. For a typical urban area, exhaust emissions are likely to be an order of magnitude less than total highway vehicle emissions. The most recent work completed in developing highway vehicle emission factors is documented in Paved Road Particulate Emissions (Reference 26). This work was completed by Midwest Research Institute (MRI) for EPA's Industrial Environmental Research Laboratory. Field measurement programs were used to develop particulate emission factors for paved roads. The nature of the measurement programs was such that exhaust and tire wear emissions were included along with reentrained road dust. The procedure used in the programs provided emission factors for four particle size classes: <30 micrometers, <15 micrometers, <10 micrometers, and <2.5 micrometers. The basic form of the emission factor is an equation that has a constant times the street surface silt loading raised to an exponent. The constant and exponent values vary depending upon the particle size fraction desired.

TABLE 5.2

AREA SOURCE POLLUTANT FACTOR REFERENCES

Area Source Category	Particle Size Factor		Sulfate Factor		Sulfur Dioxide Factor	
	Source Category	Reference	Source Category	Reference	Source Category	Reference
Coal Combustion (res., C/I, industrial fuel)	Bit. coal comb.-stokers	Table 5.1	Bit. coal comb.-stokers	Table 5.1	Bit. coal comb.-stokers	Table 5.1
Residual Oil Combustion						
- C/I fuel	Resid. oil comb.-industrial	Table 5.1	Resid. oil comb.-commercial	Table 5.1	Resid. oil comb.-commercial	Table 5.1
- Industrial fuel	Resid. oil comb.-industrial	Table 5.1	Resid. oil comb.-industrial	Table 5.1	Resid. oil comb.-industrial	Table 5.1
Distillate Oil Combustion						
- Res. and C/I fuel	Dist. oil comb.-industrial	Table 5.1	Dist. oil comb.-commercial	Table 5.1	Dist. oil comb.-commercial	Table 5.1
- Industrial fuel	Dist. oil comb.-industrial	Table 5.1	Dist. oil comb.-industrial	Table 5.1	Dist. oil comb.-industrial	Table 5.1
Natural Gas Combustion (res., C/I, indus. fuel)	Residential nat. gas	KVB	Nat. gas comb.-boilers	SURE	Nat. gas comb.-boilers	SURE
Wood Combustion (res. fuel)	Fireplaces	KVB	Wood comb.-commer. boilers	SURE	Wood comb.-commer. boilers	SURE
Agricultural Equipment						
- Diesel	IC engine-diesel	KVB	IC engine	SURE	IC engine	SURE
- Gasoline	IC engine-gas.	Ref. 29	IC engine	SURE	IC engine	SURE
Construction Equipment						
- Diesel	IC engine-diesel	KVB	IC engine	SURE	IC engine	SURE
- Gasoline	IC engine-gas.	Ref. 29	IC engine	SURE	IC engine	SURE
Industrial Equipment						
- Diesel	IC engine-diesel	KVB	IC engine	SURE	IC engine	SURE
- Gasoline	IC engine-gas.	Ref. 29	IC engine	SURE	IC engine	SURE
On-site Incineration	Incin.-municipal refuse	Table 5.1	Incin.-municipal refuse	Table 5.1	Incin.-municipal refuse	SURE
Railroad Diesel	IC engine-diesel	KVB	IC engine	SURE	IC engine	SURE
Aircraft						
- Civil	IC engine-gas.	Ref. 29	IC engine	SURE	IC engine	SURE
- Commercial and military	IC engine-diesel	KVB	IC engine	SURE	IC engine	SURE

TABLE 5.2--Continued

Area Source Category	Particle Size Factor[a]		Sulfate Factor[a]		Sulfur Dioxide Factor[a]	
	Source Category	Reference	Source Category	Reference	Source Category	Reference
Vessels						
- Residual oil	Resid. oil comb.-industrial	Table 5.1	Resid. oil comb.-industrial	Table 5.1	Resid. oil comb.-industrial	Table 5.1
- Diesel	IC engine-diesel	KVB	IC engine	SURE	IC engine	SURE
- Gasoline	IC engine-gas.	Ref. 29	IC engine	SURE	IC engine	SURE
Small Gasoline Engines	IC engine-gas.	Ref. 29	IC engine	SURE	IC engine	SURE
Construction Activity	Construction dust	KVB	NA	NA	NA	NA
Agricultural Tilling	Agricultural tilling	KVB	NA	NA	NA	NA
Unpaved Roads	Unpaved roads	Table 5.1	NA	NA	NA	NA
Unpaved Airstrips	Unpaved roads	Table 5.1	NA	NA	NA	NA
Forest Fires	Forest fires	KVB	NA	NA	NA	NA
Agricultural Burning	Agricultural burning	KVB	NA	NA	NA	NA
Structural Fires	Structural fires	KVB	NA	NA	NA	NA
Prescribed Burning	Agricultural burning	KVB	NA	NA	NA	NA

NA Pollutant not emitted from area source category.
[a] All factors represent uncontrolled conditions.

To aid in emission inventorying efforts, MRI generated mean silt loading values to be used with the emission factor equation. MRI characterized silt loading variations based on a roadway classification system. The roadway types included in the system were freeways/expressways, major streets/highways, collector streets, and local streets. These road types were defined in Section 2. The mean silt loading value was lowest for freeways/expressways and highest for local streets. The highest value is about 65 times greater than the lowest.

Rather than using the MRI-derived mean silt loading values for this very important category, ES conducted a limited paved road sampling study in the Philadelphia area. The results of that effort were described in Section 2. Each typical road sampled was classified into one of the four road types previously identified. In cases that more than one sample was collected for a road type, the mean of the values was calculated. The resulting silt loading values for each road type are shown in Table 5.3. These values were used with the equations derived by MRI to calculate particle size emission factors. The basic emission factor equation is as follows:

$$e = k \left(\frac{SL}{0.5}\right)^{P}$$

where: e = the emission factor in grams per vehicle-kilometer traveled
k = a constant depending upon the particle size fraction
SL = the silt loading in grams per square meter
P = an exponent depending upon the particle size fraction

For the 2.5 micrometer particle size fraction, the values given by MRI for k and P are 1.02 and 0.6, respectively. For the 10 micrometer particle size fraction, the values for k and P are 2.28 and 0.8, respectively. Based on these values and the silt loadings in Table 5.3, emission factors were calculated for particles less than 10 micrometers and for particles less than 2.5 micrometers. The emission factor for the 2.5 micrometer particle sizes was subtracted from the emission factor for the 10 micrometer particle sizes to obtain the emission factor for particle sizes between 10 and 2.5 micrometers. These emission factors are shown in Table 5.4 and were provided to DVRPC for use in generating the highway vehicle model input. DVRPC classified each of the links in its highway network into one of the four roadway types used by MRI and applied the emission factors in Table 5.4 accordingly.

Separate particulate emission factors for exhaust and tire wear are available. They depend upon vehicle and fuel type. The factors derived by MRI for total particulate emissions, although inclusive of exhaust and tire wear, depend upon silt loading and roadway class. Thus, it would be difficult to relate one set of factors to the other. The MRI procedure had to be used since it was the best available to account for reentrained road dust. The only use that could have been made of the exhaust and tire wear factors was to attempt to subtract them from the MRI factors to identify the reentrained road dust component. Because this was thought to be of no value, separate exhaust and tire wear factors were not used.

TABLE 5.3

SILT LOADING VALUES FOR PHILADELPHIA

Roadway Type	Silt Loading (g/m^2)
Local Streets	0.061
Collector Streets	0.085
Major Streets/Highways	0.149
Freeways/Expressways	0.022

TABLE 5.4

HIGHWAY VEHICLE PARTICULATE EMISSION FACTORS

Roadway Type	Emission Factor (g/mi)	
	Particle Sizes <2.5 micrometers	Particle Sizes >2.5 and <10 micrometers
Local Streets	0.4642	0.2178
Collector Streets	0.5664	0.3229
Major Streets/Highways	0.7932	0.6001
Freeways/Expressways	0.2517	0.0499

Sulfate Factors

The publication Compilation of Air Pollutant Emission Factors: Highway Mobile Sources (Reference 27) from the U.S. EPA Office of Mobile Source Air Pollution Control (OMSAPC) contains sulfate emission factors. The factors are based on vehicle, fuel, and catalyst type and are shown in Table 5.5. The factors were measured using the crowded freeway driving system cycle and typical sulfur-in-fuel quantities. DVRPC had no data on the type of catalyst with which the light duty gasoline vehicles were equipped. ES therefore obtained data from OMSAPC in Ann Arbor, Michigan, on the national percentages of vehicles equipped with each type of catalyst for the period from 1975 through 1982. These data are shown in Table 5.6. Using the percentages in Table 5.6, ES calculated a weighted average sulfate emission factor for catalyst-equipped vehicles for each model year from 1975 through 1982. The resulting factors are identified in Table 5.7. Assuming a national registration mix for mid-1982 as provided in Table 1.1.4A of Reference 27, a model-year-weighted sulfate emission factor for catalyst-equipped light duty vehicles was calculated. The resulting emission factor, 0.0122 g/mi, was provided to DVRPC along with the emission factors shown in Table 5.5 for the other vehicle types.

Sulfur Dioxide Factors

Reference 9 (AP-42) contains highway vehicle emission factors for sulfur oxides (SO_x) in Section 1 of Chapter 3. The factors vary according to vehicle and fuel type and were based on specified miles-per-gallon assumptions and typical sulfur-in-fuel amounts. Appendix D of Reference 9 provides information on the sulfate portion of the SO_x emission factors for each vehicle type including catalyst versus noncatalyst.

Using the information in Reference 9, the sulfate portion of the SO_x emission factors was subtracted leaving the SO_2 portion. The SO_2 factors were then adjusted to account for differences in fuel economy specified in Reference 9 versus 1982 fuel economy. The 1982 cumulative average fuel economy figures were obtained by weight-averaging individual year miles-per-gallon figures from Highway Statistics and from communications with the U.S. Department of Transportation. Weighting was accomplished using published national figures on model year fraction of annual miles traveled. Documentation of this procedure can be found in Reference 28 - Emissions Inventories for Urban Airshed Model Application in the Philadelphia AQCR. The resulting SO_2 emission factors shown in Table 5.8 were provided to DVRPC.

TABLE 5.5

SULFATE EMISSION FACTORS FOR HIGHWAY VEHICLES

Vehicle Type	Technology Type	Emission Factor (g/mi)
LDGV/T[a]	All noncatalyst	0.001
LDGV/T	Oxidizing catalyst, no air pump	0.005
LDGV/T	Oxidizing catalyst, air pump	0.020
LDGV/T	Three-way catalyst, no air pump	0.001
LDGV/T	Three-way + oxidizing catalyst, air pump	0.025
HDGV[b]	All	0.001
LDDV[c]	All	0.011
LDDT[d]	All	0.018
HDDV[e]	4-stroke[f]	0.081
MC[g]	All	h

a Light duty gasoline vehicle/truck.
b Heavy duty gasoline vehicle.
c Light duty diesel vehicle.
d Light duty diesel truck.
e Heavy duty diesel vehicle.
f All heavy duty diesel vehicles assumed to be 4-stroke.
g Motorcycle.
h Assumed to be negligible.

TABLE 5.6

PERCENTAGE OF LIGHT DUTY GASOLINE VEHICLES BY CATALYST TYPE 1975-1982[a]

Catalyst Type	Model Year Percentage							
	82	81	80	79	78	77	76	75
Oxidizing catalyst, no air pump	3.1	3.1	37.0	47.1	50.9	54.8	55.3	52.1
Oxidizing catalyst, air pump	9.2	9.3	45.2	25.3	27.4	29.5	29.8	28.1
Three-way catalyst, no air pump	21.3	24.7	10.2	14.3	6.0	0.0	0.0	0.0
Three-way + oxidizing catalyst, air pump	61.8	56.8	2.6	0.0	0.0	0.0	0.0	0.0
Total	95.4	93.9	95.0	86.7	84.3	84.3	85.1	80.2

[a] Remainder of vehicles are noncatalyst or diesel.

TABLE 5.7

WEIGHTED AVERAGE EMISSION FACTORS FOR CATALYST-EQUIPPED VEHICLES
1975 - 1982

Model Year	Sulfate Emission Factor (g/mi)
1982	0.0185
1981	0.0175
1980	0.0123
1979	0.0087
1978	0.0096
1977	0.0102
1976	0.0103
1975	0.0103

TABLE 5.8

SULFUR DIOXIDE EMISSION FACTORS FOR HIGHWAY VEHICLES

Vehicle Type	Sulfur Dioxide Emission Factor (g/mi)
LDGV/T - noncatalyst	0.099
LDGV/T - catalyst	0.069
HDGV	0.353
LDDV/T	0.535
HDDV	2.772
MC[a]	0.022

[a] All highway motorcycles assumed to be 4-stroke.

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SECTION 6

TEMPORAL RESOLUTION OF EMISSIONS

INTRODUCTION

In order to obtain the hourly emission inputs required by the urban particle model, ES elected to make use of the best emissions data currently available -- annualized information from the regulatory agencies -- and develop hourly emissions from it. The temporal variation of highway vehicle emissions was obtained by DVRPC and is documented in Appendix C. This section addresses the point, IPFPE, and area source categories.

The model requires hourly emission rates for the period of 1982 from July 14 at 6 p.m. until August 13 at 6 p.m. Although this is a very specific time frame, a real-time inventory for all sources could not be completed for the resources allocated to this project. Procedures were developed to generate hourly emission rates using data that could be collected within the framework of this study. For selected point sources, sufficient information was obtained to calculate hourly emission rates. For other point sources, only data on capacity utilization could be obtained. For the remaining sources, operating data within the point source masterfile were used to derive hourly emissions. Simplified procedures were also used for area sources. The computer mechanisms for creating the hourly model inputs are described in Section 7.

The temporal factor files used to create the urban particle model input are shown in Appendix G. Only the sources for which specific temporal data were gathered are included in the file. Inventory operating data and the computer mechanisms and assumptions documented in Section 7 were used for other sources. The portions of this section that follow describe the data collected to obtain the temporal detail required by the model. Point and IPFPE sources are covered first, followed by area sources. It should be noted that precipitation events were not accounted for in developing the hourly emission estimates. As a result, the model will not be able to accurately predict monitored concentrations during precipitation using the inputs developed by ES.

POINT AND IPFPE SOURCES

As previously indicated, ES could not attempt to generate a real-time inventory for the July/August monitoring period. Sufficient data to calculate hourly emissions were, however, requested from all electric utility companies operating in the Philadelphia area. This request was made because

there are a limited number of power plants and they are likely to be among the largest particulate and SO_x emitters. In addition, utilities normally maintain the detailed operating records needed to determine hourly emissions.

After making telephone contact with company personnel, letters were written to request the needed data. Information was solicited from each of the utility companies: Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company and Atlantic City Electric Company. Identical information was requested from each of the companies for the significant plants in the area. For the following plants, ES requested sufficient information on load, control equipment, and fuel type and quality to calculate hourly emissions:

Company	Plant
Philadelphia Electric	Eddystone and Cromby
Public Service Electric & Gas	Mercer and Burlington
Delmarva Power & Light	Edgemoor and Delaware City
Atlantic City Electric	Deepwater

Less detailed data were requested for other plants; ES asked that general information concerning how the plants operated during the inventory period be provided. Although each of the companies supplied data, it was not of the same detail. All data submitted were utilized in generating the needed temporal factors. The approach used was to attempt to calculate actual emissions for each hour and develop an hourly factor based on the annual emission rate included in the point source masterfile. A less detailed procedure was applied when insufficient information was available. Hourly factors were developed for all significant plants from the information supplied. These factors are included in Appendix G.

Other temporal data gathered for facilities in the Philadelphia area consisted of two sources. First, a substantial amount of information was obtained during the time that ES contacted the facilities to determine which could be source-tested. Although this was not the main goal of the contacts, the information was provided to clarify the operational status of the facilities so that a decision concerning which sources to test could be made. A discussion of the point source contacts is provided in Section 2 of this report. In general, all of the largest emitters were contacted and the following types of information obtained:

- Unit No. 2 at Philadelphia Electric Eddystone was not operating during several days of the last two weeks of July, and two of the residual oil boilers at the plant did not operate from July 14 - August 13.

- Sulfuric acid production at the Repauno plant of E.I. Dupont de Nemours was 25% of normal production and at a greater conversion efficiency (99.2 versus 98.5%).

- BP Oil was running low sulfur crude during the study period and had only one sulfur plant operating. SO_2 emissions were about 5 lbs/hr.

- Gulf Oil Company had only one FCC unit operating during the study period.

- Gulf and Western plant did not operate during study period.

- ARCO Petroleum Products Beavon unit on sulfur recovery plant was shut down from mid July through end of study period. Refinery operating at low level during period and thus SO_2 emissions minimized.

- Some open hearths and sintering plants at U.S. Steel not operating during study period.

- Allied Chemical's Frankford Plant only had Unit No. 2 operating.

- Farmers Export Company was shut down during the study period since no grain was available to be loaded.

- Tidewater Grain was also inoperative until the next shipping season in October.

- Public Service Electric and Gas was operating on about 70% coal and 30% gas during the study period.

- Keystone Coke plant closed.

- Philadelphia Coke plant closed.

Based on this information, factors were prepared for the temporal file described in Section 7.

A second source of information used to obtain temporal profiles was the regulatory agencies in the Philadelphia area. Regulatory agencies normally require sources to notify them of changes in operations that affect emissions. The Philadelphia area agencies conduct plant inspections on a regular schedule and it is likely that some were conducted during, immediately before, or immediately after the July/August monitoring period. The agencies were contacted by telephone to discuss the study and later sent a letter requesting information on sources with large particulate or SO_x emissions and on significant sources located near the six monitoring sites. The regulatory agency contacts produced information concerning the operation of the following facilities for the July/August study period:

Gulf Oil
Atlantic Richfield
Container Corporation
Philadelphia Electric-Christian Street and Beach Street
Northwest Incinerator
East Central Incinerator
Lee Tire
Firestone (now Occidental)
Westinghouse (Lester)
PQ Corporation
Stauffer Chemical
Sun Olin
Dupont - Edge Moor
Phoenix Steel
Allied Chemical (Delaware)
Witco Chemical (Trainer)
BP Oil

Goodyear (retread plant)
Philadelphia Electric-Eddystone
Sun Shipbuilding (now Pennsylvania Shipbuilding)
Sun Oil
U.S. Steel - Fairless
Kaiser Refractory
CertainTeed
Getty

The types of information obtained varied from rather detailed data in some cases to a statement that the facility did not operate or operated normally during the study period. Using this information, ES developed appropriate factors for the temporal file described in Section 7. No other factors were input to the temporal file; temporal variations for the other sources were generated by computer using operating data in the point source masterfile.

AREA SOURCES

Area source temporal profiles were generated on a category-by-category basis. Where no temporal variations could be developed from existing information, the following default values were utilized:

Summer Percentage	Daily Percentage	Hourly Percentage
25	1.087	4.167

The seasonal percentage represents an even division of the annual emissions into the four seasons of the year. The daily temporal percentage represents an equal assignment to each of the 92 days in the summer. The hourly percentage results from equal distribution of the daily emissions into the 24 hours in a day. The balance of this chapter discusses each of the area source categories, including those for which the default values were applied.

Anthracite Coal Use (90100111, 90200111)

Anthracite coal is used primarily for space heating. Accordingly, the seasonal usage profile was developed from meteorological heating degree-day information. By finding the percentage of the total heating degree-days in a given season, a 56-25-1-18 split for winter-spring-summer-fall was developed. The hourly profile for natural gas usage was applied to the residential category. No distinctions were made between weekdays and weekend days. The hourly pattern for the commercial category was developed by dividing 50% of the daily usage equally between the working hours of 8 a.m. - 5 p.m. EDT. This assumption is based on the greater need for space heating during business hours. A slight weekday vs. weekend day preference was included by assuming an operating week of 5.5 days. This figure assumes that half of the commercial establishments are open five days a week and the other half are open six.

Natural Gas Use (90100500, 90200500, 90300500)

This category was divided into three subcategories: residential, commercial, and industrial gas use. From figures found in Residential and Commercial Area Source Emission Inventory Methodology for the RAPS (Reference 1), the hourly summer-season natural gas flows for the LaClede, St. Louis, gas system were obtained. The assumption made in that and the present study was that hourly flows are the same for both the residential and the commercial categories. To simulate the summer, the graph for gas flows at a temperature greater than 68°F was used. Industrial gas diurnal variations indicate that 44% of the daily use occurs during the peak business hours (8 a.m. to 4 p.m. EDT).

No weekday-weekend day variations were accounted for in the residential category. The industrial subcategory was based on a six-day workweek, while commercial emissions were based on a 5.5 day workweek for the same reason given in the anthracite coal use category.

Natural gas seasonal profiles by category were acquired directly from the Public Service Gas and Electric Company in New Jersey and the Philadelphia Electric Company. Since the seasonal profiles provided by the two companies were nearly identical, a single profile was placed in the temporal file for each category of user.

Residential Wood Burning (90100600)

In this category, the least significant of the fuel use categories, no summer-season emissions were assigned. One hundred percent of the emissions were assumed to occur in the period October through April, resulting in a 60-20-0-20 seasonal breakdown by quarters.

Residual Oil Use (90200440, 90300440)

This category was divided into subcategories of commercial and industrial uses. Seasonal variations for commercial residual oil use were based on degree-day information. Industrial residual oil use differed from commercial in that a six-day instead of a 5.5 day operating week was used. The six-day figure assumes that while many industrial processes require continuous fuel use, other industrial processes cut back significantly on the weekend and that the average industrial use is, therefore, six days per week. Also, 50% of the industrial use was allocated to the business hours of 8 a.m. to 5 p.m. EDT to reflect greater production during business hours.

Distillate Oil Use (90100330, 90200330, 90300330)

The seasonal cycle for distillate oil use in the residential subcategory was based on heating degree-days, just as for anthracite coal use. Except for commercial natural gas use and residential wood burning, daily and hourly percentages for fuel use within a specific subcategory (e.g., residential) were the same for all fuel sources within that subcategory. Therefore, the daily and hourly factors for distillate oil consumption were the same as

those mentioned above for anthracite coal use. Likewise, the temporal profile for industrial distillate oil use was the same as that for industrial residual oil use.

Bituminous Coal Use (90200222, 90300222)

As shown in Section 4, over 96% of the bituminous coal use was industrial in nature, with the remainder being commercially used in the area source inventory for Montgomery County, Pennsylvania. The industrial operating schedule of six days per week for bituminous coal was the same as that for residual and distillate oil. Commercial bituminous temporal use was 5.5 days for the same reason given for commercial anthracite use. Seasonal and hourly breakdowns were the same as those for the other fuel types.

On-Site Incineration (90401300)

Only New Jersey commercial incinerators were included in the area source portion of the inventory, since incineration in other portions of the study area was included in th point source inventories. No seasonal variations were assumed. Nearly all of the emissions were allocated between the hours of 8 a.m. - 6 p.m. EDT. The allocation assumes that nearly all on-site incineration is accomplished during business hours. A 5.5-day operating week was assumed, based on typical incineration schedules.

Agricultural Equipment and Agricultural Tilling (90700700, 90600700) and (91207400)

Temporal variations for these categories follow the guidelines suggested in RAPS Off-Highway Mobile Source Emission Inventory (Reference 2). Farm equipment was assumed to be in use from March through October. Twenty percent of the emissions were allotted to the summer, with 35% and 45% allocated to the adjacent spring months and autumn months, respectively. These figures reflect springtime planting and autumn harvesting. Emissions were assigned to the hours of 6 a.m. to 8 p.m. EDT, with a six-day workweek also assumed.

Construction Equipment and Construction Activity (90700800, 90600800) and (91207300)

The hourly and daily factors for the construction categories were obtained from the second edition of the Procedures document (Reference 3). These profiles indicate a 5.5-day operating week, with 12-hour long weekday operations beginning at 7 a.m. EDT. Because of weather considerations, zero construction activity was assumed during the winter. The seasonal distribution was divided evenly between the other three quarters.

Industrial Equipment (91002400, 91308300)

Hourly factors for industrial equipment supplied by OAQPS for the Philadelphia oxidant study divide 80% of the daily emissions equally between 7 a.m. and 4 p.m. EDT and the remaining 20% equally between 4 p.m. and 11 p.m. EDT. Summer emissions are 30% of the annual, and operations are 6 days per

week from the industrial equipment category in Procedures Volume II (Reference 3).

Small Gasoline Engines (90600900)

According to AP-42, lawn and garden use comprises 89% of this category. The temporal factors were therefore taken from the lawn and garden temporal apportionment sections of Reference 2 and Reference 3. Accordingly, 65% of the emissions were allotted to the summer. A uniform hourly profile began at 9 a.m. and ended at 7 p.m. EDT with 50% of all emissions occurring on weekend days.

Railroads (90702400)

The majority of emissions in this category are due to freight service rather than passenger service. Therefore, a sales manager at Conrail was contacted who supplied the temporal data necessary for this category. Thirty-six percent of the traffic occurred uniformly between 6 p.m. and midnight EDT, and the remaining 64% was equally distributed around the clock. Midday local traffic involved the movement of boxcars for loading and unloading. No seasonal variations were assumed. The Conrail sales manager indicated there was only a slight weekday-weekend day preference, so an operating schedule based on a 6.3-day workweek was assumed.

Aircraft and Unpaved Airstrips (90803100, 90803200, 90803300) and (91207200)

Data were collected for the aircraft category through telephone conversations with officials at Philadelphia International Airport and other local airports. Generally, commercial traffic was reported to be greater during the daylight hours, especially late afternoon and early evening. Hourly variations were the most dramatic for the civil aircraft category (92% between 10 a.m. and 10 p.m. EDT). Least affected was the military category (55% between 10 a.m. and 10 p.m. EDT). No seasonal variations were assumed. Also, no weekday-weekend day variations were expected for military or commercial aircraft. However, due to the nature of civil aircraft flights, this category was highly biased toward the weekend days. Fifty percent of the weekly emissions were allocated to Saturday and Sunday. The civil aircraft profile was used for unpaved airstrips.

Vessels (90904230, 90900440, 90904430)

This category is divided into three subcategories based on fuel type. Diesel- and residual-fuel powered vessels include large river and ocean-going barges for which no temporal variation was assumed. The gasoline-powered vessels are predominantly for recreational use. Seasonal emissions for this subcategory were therefore divided into 25% each for the spring and fall quarters and 50% for the summer. As suggested in Reference 3, 75% of the emissions for recreational vesssels was assumed to occur uniformly between 6 a.m. and 6 p.m. EDT with 50% of weekly emissions occurring on Saturday and Sunday.

Unpaved Roads (91207100)

The temporal variation in unpaved road emissions was assumed to be related to vehicle-miles traveled (VMT). Traffic counts are not, however, collected for unpaved roads. As a result, traffic data obtained from DVRPC for rural, paved roads were used to develop temporal factors for this category.

Agricultural Burning (91308200)

The principal source of data for agricultural burning was local agricultural officials. The only temporal variations used were hourly. Emissions were assigned uniformly to the daylight hours of 6 a.m. to 9 p.m. EDT only.

Prescribed Burning (91308500)

State forestry departments indicated that there is no prescribed burning during the summer. Sixty to 80% occurs during the spring, 20% during the fall, and the remainder during the winter.

Forest Fires and Structural Fires (91308100) and (91308400)

Due to the nature of these categories, no temporal variations were assumed. The uniform percentages listed at the beginning of this section were utilized for these categories.

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SECTION 7

PREPARATION OF MODEL INPUT

INTRODUCTION

The urban particle model to be validated with Philadelphia measurements requires detailed input data describing the spatial and temporal nature of air pollution emissions. Of prime concern are the emissions of primary particulate matter and pollutants that undergo atmospheric chemical reactions to form secondary particulates. Most emission inventories today contain only total annual emissions of the criteria pollutants, and there is a need to disaggregate these totals to reflect the seasonal and diurnal variations in emission intensity. There is also a need to estimate the proportion of the various constituents of emission totals and to report the hourly variations of each component.

To be specific, the model requires an inventory that provides hour-by-hour emissions of primary sulfate, other particulates, and sulfur dioxide. In addition, the particulates and sulfates must be fractionated into two particle size classes. The inventory must include major and minor industrial sources, area sources, and highway vehicle sources. This section discusses the procedures for preparing the emissions inputs to the model.

DATA PROCESSING SYSTEM

The original point source emission inventories obtained from the state agencies were in EIS/P&R format or could be easily converted. The area source inventory produced by ES was also in EIS/P&R format. The EIS format is especially suitable because of the availability of software for file maintenance, retrieval, and reporting. There was, however, no means for performing detailed disaggregations until ES developed an auxiliary system for this purpose using EIS/P&R files as input.

The data processing system used by ES consists of separate modules for applying temporal and component factors, for combining minor point source emissions into area source grids, and for preparing output data in the required format.

For each source, the first program applies factors input by the user to disaggregate total emissions of a pollutant into its components. For particulate emissions, factors are applied to determine the portion that is sulfate and to divide the particulates and sulfate into two particle size classes. The amount of sulfate may also be factored as a proportion of sulfur dioxide

emissions. Because different source classes have different component proportions, the factors are indexed by the Source Classification Code (SCC). The program also applies general or specific temporal factors, obtained from input cards or derived from schedule information in the EIS file, to produce hourly rates from the annual totals. The program is capable of processing more than one set of 24 factors for each source to reflect weekday/weekend differences or special cases where the schedule varies daily. A similar program was used for the highway vehicle sources but the emissions data were in a format completely different from EIS.

A second program is used to further process the output from the factoring step. This program produces an inventory for each hour of every day in a study period by selecting a dated or derived emission record for each source. If minor sources are being processed, the source location is used to determine the area source grid cell to which the emissions are to be added and only the totals for each cell are output. Finally, the data are output in model input format.

Further information concerning the application of temporal and component distributions and the preparation of output data is presented in the remainder of this section.

COMPONENT DISTRIBUTIONS

Each particulate emission source emits a characteristic blend of particle sizes. To account for the differences in composition, an auxiliary file is established to provide component factors specific to a particular point or general factors applicable to the source category. Also, since sulfate emissions are not recorded in the emission inventories being used in this study, it is necessary that they be determined as some fraction of total particulate or SO_x emissions. Thus, the information on a size distribution record contains six values as shown in Table 7.1. These are the factors for obtaining sulfate emissions from either total particulate or sulfur oxides emissions and values for fractionating these emissions and the remaining particulate mass into two size classes.

In some cases, specific factors are available for particular points. This information is indexed by a matching state/county/plant/point (key) ID. Other factors indexed by industrial class and machine process using SCC and SIC code are provided in the file to cover those sources where point-specific records are not available. The distribution process consists of multiplying total annual particulate or sulfur oxides emissions by the sulfate fraction and sulfate size fractions to yield the two annual values of sulfate emissions distributed by size. The remaining particulate mass is multiplied by particulate size fractions in a similar manner. These annual values are then multiplied by the appropriate temporal factors to yield hourly rates. Emissions of sulfur oxides are multiplied by SO_2/SO_x ratios to obtain sulfur dioxide emissions.

TABLE 7.1

FORMAT FOR PARTICLE SIZE DISTRIBUTION FACTORS

Field Description	Field Length	Card Columns	Comment
Identification[a]			
State	2	1-2	
County	4	3-6	
Plant	4	7-10	
Point	2	11-12	
Factor 1[b]	7	13-19	Factor for determining sulfate emissions from total particulate emissions
Factor 2[b]	7	20-26	Factor for determining sulfate emissions from sulfur oxides emissions
Unused	7	27-33	
Factor 3	7	34-40	Factor for determining SO_2 emissions from SO_x emissions
Factor 4	7	41-47	Fraction of particulate mass with particle size $\leq$2.5 microns
Factor 5	7	48-54	Fraction of particulate mass with particle size 2.5-10 microns
Unused	24	55-78	
Control Device Code	1	79	1 = uncontrolled 2 = fabric filter 3 = ESP 4 = scrubber used only when card identification is 'p'
Card Identification[c]	1	80	

[a] For records providing factors by machine process and industrial classification, the identification consists of an 8-digit SCC followed by an optional 4-digit SIC code.

[b] One or the other of these factors can be used for each point or SCC.

[c] The card identification consists of the letters K and P, denoting whether the identification code is a key ID or process ID.

TEMPORAL DISTRIBUTIONS

For some sources, day-to-day variations in hourly emissions are known from actual operating information, and for others, variations are known for a typical day. For others still, the best information available may be the seasonal throughput fractions and normal operating schedule listed in the EIS/P&R file. The latter may be processed directly using no additional input data. An auxiliary file must be prepared, however, to process those sources where better temporal information is available. The file is used to input factors representing typical weekday or weekend day conditions and also factors specific to a particular date. When processing a source, the factoring program searches the temporal file for applicable records matching the state/county/plant/point ID for point sources or the category number for area sources. Output records containing 24 hourly emission values are prepared for all typical-condition and date-specific records. If an applicable record is not found in the file, the program derives factors from EIS/P&R data in the following manner:

$$F = \frac{Q}{13*D*H}$$

where: F = the hourly temporal factor
Q = the seasonal throughput fraction
D = the number of days of operation per week
H = the number of hours of operation per day

default values: Q = 25% per quarter
D = 7 days per week
H = 24 hours per day

When a point operates five days per week, no weekend day emissions are assigned; when a point operates six days per week, no Sunday emissions are assigned. If a point operates N hours per day where N is less than 24, the calculated hourly factors are assigned continuously beginning with the hour from 7:00 a.m. to 8:00 a.m. (hour 8) until all N factors have been assigned. All other hours are assigned a factor of zero. The time frame used in assigning temporal factors of all types is local prevailing time, in this case EDT. For area sources, temporal records are prepared for every category since the EIS/P&R file contains no operating data.

The daily temporal factor, when multiplied by annual total emissions, yields daily emissions. The hourly factors are calculated from hourly data and multiplied by the daily emissions to produce hourly emissions. The format for the temporal factor records to be input is given in Table 7.2.

INTERMEDIATE PROCESSING

Component and temporal factors are applied to inventories representing major point, minor point, industrial process fugitive particulate, highway vehicle, and area sources in separate executions of the factoring program so that source category contributions can be maintained. Table 7.3 gives the

TABLE 7.2

FORMAT FOR TEMPORAL DISTRIBUTION FACTORS

Field Description	Field Length	Card Columns
Identification[a]		
State	2	1-2
County	4	3-6
Plant	4	7-10
Point	2	11-12
Daily Factor (Card 1)		
Date[b]	4	13-16
Unused	6	17-22
Particulate Factor (if blank, SO_2 factor used)	7	23-29
Sulfur Dioxide Factor (if blank, particulate factor used)	7	30-36
Unused	42	37-78
Hourly Factors (Cards 2, 3, and 4)		
Date[b]	4	13-16
Unused	6	17-22
Factor 1[c]	7	23-29
Factor 2	7	30-36
Factor 3	7	37-43
Factor 4	7	44-50
Factor 5	7	51-57
Factor 6	7	58-64
Factor 7	7	65-71
Factor 8	7	72-78
Card Identification[d]	1	79
Key Type[e]	1	80

a For area source records, the identification consists of an 8-digit SCC defining the emission category, followed by 4 blanks.

b Date consists of month and day. When a value is not input for a specific date, one of the following is used in cc 13-14: 01 - Monday; 02 - Tuesday; 03 - Wednesday; 04 - Thursday; 05 - Friday; 06 - Saturday; 07 - Sunday; 08 - weekday; 09 - weekend day; and 10 - daily.

c Because only 8 of 24 factors can be entered on an 80 column card, multiple cards are required. These additional cards provide Factor 9 through Factor 16 and Factor 17 through Factor 24, respectively. Factor 1 represents hour 1 which is midnight to 1 a.m. EDT.

d The integers 1, 2, 3, and 4 denote the card sequence in the four-card group.

e Key type is K if identification is key-ID and P if identification is an SCC.

TABLE 7.3

FORMAT FOR INTERMEDIATE EMISSION RECORDS

Field Description	Field Length	Card Columns
Identification[a]		
State	2	1-2
County	4	3-6
Plant	4	7-10
Point	2	11-12
Source UTM Coordinates[b]		
x(km)	6	13-18
y(km)	7	19-25
Pollutant Name	11	26-36
Emissions (g/sec) Hour 1[c]	8	37-34
.	.	.
.	.	.
.	.	.
Emissions (g/sec) Hour 24	8	221-228
Record Information		
Run Identification	6	229-234
Date	4	235-238
Pollutant Code[d]	2	239-240

a For area source records, the identification field is filled with the text 'AREA SOURCE' since one grid cell may consist of portions of two counties.

b For area sources this field contains the coordinates of the southwest corner of the grid cell.

c Hour 1 corresponds to midnight to 1 a.m. EDT, Hour 2 is 1 a.m. to 2 a.m. EDT, etc.

d Five records are prepared per point per hour. Each is identified by one of the following codes:

01 - particles of diameter, d, $\leq$2.5 microns
02 - particles 2.5 microns <d <10 microns
03 - sulfate particles d $\leq$2.5 microns
04 - sulfate particles 2.5 microns <d <10 microns
05 - sulfur dioxide

format of the intermediate output records. Following this, a post-processing program selects one factored output record per source for the particular date being processed. If a date-specific emission record, it is selected; otherwise, a typical-condition or derived record is selected. Then, the program places the emission rates for five components (two size classes of sulfate, two size classes of other particulates, and sulfur dioxide) for the starting hour on one output record per source. After records have been output for all sources in the inventory for the starting hour, the process is repeated until all 24 hours have been output. The program then selects factored output records for the following day and continues to output the entire inventory on an hour-by-hour basis until the end of the study period. An additional feature of the program is that it sums the emissions of minor point sources and outputs only the totals for the grid cells in which they are located. The program is also capable of summing the contributions from various source categories. This capability is used to combine emissions from minor points, highway vehicles and area sources within each area source grid cell. A separate inventory for industrial process fugitives can be generated to account for the fact that these emissions occur over a smaller area than a grid cell. Thus, the model input consists of major point source, industrial process fugitive, and area source components.

OUTPUT DATA

The final output records appear as in Table 7.4. There is space to record the source number, geographic coordinates, 24-hourly emission rates and fields for identification of pollutant, date, and run number. For each source there are five records containing 24 emission values. The major point sources have additional records in a separate file that present stack characteristics. The records are in the format of Table 7.5. For each day processed, a separate file is prepared. It will then be a simple task for ESRL to select hourly emissions from the appropriate file and to further format these records if required for use with the particle model.

TABLE 7.4

FORMAT FOR OUTPUT RECORDS

Field Description	Field Length	Card Columns
Identification[a]		
State	2	1-2
County	4	3-6
Plant	4	7-10
Point	2	11-12
Source UTM Coordinates[b]		
x(km)	6	13-18
y(km)	7	19-25
Emissions		
Particles d $\leq$2.5 microns	10	26-35
Particles 2.5 microns <d <10 microns	10	36-45
Sulfate Particles d $\leq$2.5 microns	10	46-55
Sulfate Particles 2.5 microns <d <10 microns	10	56-65
Sulfur Dioxide	10	66-75

a Blank for area source records.

b Used for area sources only and contains the coordinates of the southwest corner of the grid.

TABLE 7.5

FORMAT FOR POINT SOURCE STACK DATA

Field Description	Field Length	Card Columns
Source UTM Coordinates		
x(km)	6	1-6
y(km)	7	7-13
Unused	7	14-20
Unused	16	21-36
Stack Data		
Height (m)	7	37-43
Diameter (m)	5	44-48
Velocity (m/s)	7	49-55
Temperature (°C)	7	56-62
Unused	6	63-68
Identification	12	69-80

APPENDIX A

TABLES OF CANDIDATE POINT SOURCES FOR TESTING

TABLE 1

SUMMARY OF LARGEST EMISSION SOURCES IN THE PHILADELPHIA AQCR

Source ID	Source Name	Process Type	Control Type	Stack Height (ft)	Distance to Monitor	Actual Emissions TSP (TPY)	Actual Emissions SO_2 (TPY)
39 2360 0014 02	Phil. Electric (Eddy)	10100202 Bit. Coal Boiler		248 ft.	11 km NW (34)	5437	30,276
08 0180 0008 02	Del. P&L	10100801 Coke Boiler		500 ft	43 km SW (34)	95	14,787
39 1660 0023 01	Phil. Elec. (Cromby)	10100202 Bit. Coal Boiler		300 ft	33 km NW (8)	1162	14,542
31 2980 0461 01	Public Service E&G	10100201 Bit. Coal Boiler		326 ft.	28 km NE (12)	526	12,397
08 0180 0016 18	Getty Oil	30699999 Fluid Coke	H.E. Cyclone/ ESP (98%)	250 ft.	43 km SW (34)	1420	11,794
08 0180 0007 05	Delmarva P&L	10100401 Residual Oil Boiler		275 ft.	10 km SW (34)	141	10,604
08 0180 0008 01	Del. P&L	10100801 Coke Boiler		500 ft	43 km SW (34)	68	9,992
39 2360 0014 01	Phil. Electric (Eddy)	10100202 Bit. Coal Boiler	Cyclone	248 ft.	11 km NW (34)	201	9,669
08 0180 0016 17	Getty Oil	30600201 Fluid Cat. Cracker		350 ft.	43 km SW (34)	1953	9,636
31 2980 0461 02	Public Service E&G	10100201 Bit. Coal Boiler		326 ft.	28 km NE (12)	235	8,449
08 0180 0008 03	Del. P&L	10100801 Coke Boiler		500 ft	43 km SW (34)	56	8,083
39 2360 0025 01	Sun Oil	30600201 Fluid Cat. Cracker		250 ft	8 km W (34)	---	7,189

Table 1 - Continued

Source ID	Source Name	Process Type	Control Type	Stack Height (ft)	Distance to Monitor	Actual Emissions TSP (TPY)	Actual Emissions SO_2 (TPY)
31 4900 0095 06	Atlantic City Elec.	10200201 Bit. Coal Boiler		175 ft	29 km SW (34)	289	4,389
08 0180 0016 19	Getty Oil	30699998 Sulfur Recovery		225 ft	43 km SW (34)	---	4,368
39 2360 0030 01	BP Oil	30600201 Fluid Cat. Cracker		163 ft.	18 km W (34)	223	4,289
31 4900 0095 08	Atlantic City Elec.	10100401 Residual Oil Boiler		226 ft.	29 km SW (34)	124	3,657
08 0180 0020 01	Stauffer Chem. Co.	30199999 Sulfur Recovery	Absorption Col (85%)	175 ft.	43 km SW (34)	---	3,467
39 7160 1501 27	ARCO	30600102 Gas Process Heater	Catalytic Oxidation (99%)	230 ft.	4 km SW (5) 10 km S (8) 10 km W (28)	---	3,419
08 0180 0007 04	Delmarva P&L	10100401 Residual Boiler 10100601 Natural Gas Boiler		220 ft.	10 km SW (34)	42	3,037
39 1660 0023 02	Phil. Elec. (Cromby)	10100401 Residual Boiler		300 ft.	33 km NW (8)	145	2,626
39 2360 0014 04	Phil. Electric (Eddystone)	10100404 Residual Boiler		249 ft.	12 km NW (34)	19	2,466
31 1760 0229 75	Mobil Oil	30600201 Fluid Cat. Cracker		270 ft.	7 km NW (34) 14 km SW (5)	27	2,466

Table 1 - Continued

Source ID	Source Name	Process Type	Control Type	Stack Height (ft)	Distance to Monitor	Actual Emissions TSP (TPY)	Actual Emissions SO_2 (TPY)
31 1760 0229 76	Mobil Oil	30600201 Fluid Cat. Cracker		270 ft.	7 km NW (34) 14 km SW (5)	27	2,466
39 1200 0020 06	U.S.S. Fairless	30300308 Coke Oven Door Leaks 39000702 Coke Oven Gas Comb.		250 ft.	25 km NE (12)	191	2,273
39 1200 0020 08	U.S.S. Fairless	30300308 Coke Oven Door Leaks 39000702 Coke Oven Gas Comb.		250 ft.	25 km NE (12)	191	2,273
39 6000 0034 44	Corson	30501610 Lime Mfg. Raw Material Storage		15 ft. plume height	40 km W (8)	1664	0
39 7160 2064 03	Tidewater Grain	30200501 Ship Loading		15 ft. plume height	5 km SW (5)	1075	0
39 6000 0058 64	Firestone Tire & Rubber	10200202 Pulver. Bit. Coal-Dry Bottom		74 ft.	45 km NW (8)	945	889
39 1200 0020 14	U.S.S. Fairless	3030815 Iron Prod. Sinter Breaker		103 ft.	25 km NE (12)	928	0
39 6000 9058 10	Firestone Tire & Rubber	30101801 PVC & Copolymers		34 ft. plume height	45 km NW (8)	705	0
39 1200 0020 07	U.S.S. Fairless	30300304 Coke Quenching		150 ft.	25 km NE (12)	674	0

Table 1 - Continued

Source ID	Source Name	Process Type	Control Type	Stack Height (ft)	Distance to Monitor	Actual Emissions TSP (TPY)	Actual Emissions SO_2 (TPY)
08 0180 0019 04	Phoenix Steel	30300904 2 Electric Arc Furnaces w/Lanc.		135 ft.	20 km W (34)	605	0
39 2360 0007 01	Del. Co. Disposal	50100101 Multiple Chamber Municipal Incin.		160 ft	16 km NW (34)	554	88
39 2360 0007 02	Del. Co. Disposal	50100101 Multiple Chamber Municipal Incin.		160 ft	16 km NW (34)	554	88
39 2360 0007 03	Del. Co. Disposal	50100101 Multiple Chamber Municipal Incin.		252 ft	16 km NW (34)	463	86
31 4900 0095 01	Atlantic City Elec.	10100401 Residual Boiler		176 ft.	29 km SW (34)	77	2,268
39 7160 1511 60	Gulf Oil	30600102 Gas Fired Process Heater		150 ft.	5 km SW (5) 11 km N (34) 12 km S (8)	0	2,136
39 2360 0014 03	Phil. Electric (Eddystone)	10100404 Residual Boiler		249 ft	12 km NW (34)	16	2,119
31 4900 0095 01	Atlantic City Elec.	10100401 Residual Boiler		224 ft.	29 km SW (34)	71	2,081
08 0180 0008 04	Del. P&L	10100801 Coke Boiler		500 ft.	43 km SW (34)	24	1,929
08 0180 0007 01	Delmarva P&L	10100401 Residual Boiler		220 ft.	10 km SW (34)	24	1,833
39 7160 1511 07	Gulf Oil	30600101 Oil-Fired Process Heater		200 ft.	5 km SW (5) 12 km N (34) 11 km S (8)	183	1,781

Table 1 - Continued

Source ID	Source Name	Process Type	Control Type	Stack Height (ft)	Distance to Monitor	Actual Emissions TSP (TPY)	Actual Emissions SO_2 (TPY)
08 0180 0021 01	Sunolin Chemical	10200401 Residual Boiler		300 ft.	20 km W (34)	288	1,768
31 4900 0095 04	Atlantic City Elec.	10100401 Residual Boiler		176 ft.	29 km SW (34)	57	1,673
08 0180 0007 03	Delmarva P&L	10100401 Residual Boiler		220 ft.	10 km SW (34)	22	1,644
39 1200 0020 21	U.S.S. Fairless	30300901 Open Hearth - Ox. Larc		160 ft.	25 km NE (12)	1899	1,244
39 1660 0035 15	General Crushed Stone	30502006 Stove Screening Convey. Handling		25 ft. plume height	40 km W (8)	1834	0
39 6000 0034 50	Corson	30501610 Lime Mfg. Raw Material Storage		15 ft. plume height	12 km N (8) 19 km NW (12)	1828	0
39 1200 0020 13	U.S.S. Fairless	30300813 Iron Production Sinter Windbox		153 ft.	25 km NE (12)	1826	1,608
39 1200 0020 19	U.S.S. Fairless	30300813 Iron Production Sinter Windbox		161 ft.	25 km NE (12)	1734	1,527

TABLE 2

MAJOR POINT SOURCES LOCATED NEAR MONITORS IN PHILADELPHIA AQCR

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
31 1760 0223 05	Du Pont	30102310 H_2SO_4 Absorber		200 ft	12 km NW (34)	28	2,101
31 1760 0225 05	Texaco	30600805 Claus Type Sulfur		198 ft	9 km NE (34) 7 km SE (5) 8 km SW (28)	--	1,971
31 1760 0225 01	Texaco Inc.	10200401 #5 & #6 Oil Boiler		221 ft	9 km NE (34) 7 km SE (5) 8 km SW (28)	195	868
31 1760 0227 14	Texaco Inc.	10200402 Waste Heat Boiler		105 ft	9 km NE (34) 7 km SE (5) 8 km SW (28)	110	863
39 7160 4904 03	Phil. Elec. Chistian Street	10100401 Residual Oil		275 ft	2 km NW (5) 11 km SW (7) 7 km SE (8) 9 km NW (28)	47	972
39 7160 4901 13	Phil. Elec. Beach Street	10100401 Residual Oil		200 ft	5 km NE (5) 5 km SW (7) 9 km SE (8) 6 km NW (28)	6	887
39 7160 4901 14	Phil. Elec. Beach Street	10100401 Residual Oil		200 ft	9 km SE (8) 6 km NW (28)	6	887
39 7160 1511 83 84	Gulf Oil	10200401 Residual Oil		200 ft	5 km SW (5) 11 km S (8) 12 km S (34)	90 79	797 674

Table 2 - Continued

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
80						70	610
81						70	610
82						70	610
85						79	674
39 7160 1501 25	Atlantic Richfield	30600101 Oil-Fired Process Heater		110 ft	4 km SW (5) 10 km S (8) 10 km W (28)	35	589
31 1760 0229 05	Mobil	10200401 Residual Boiler		226 ft	7 km NW (34)	116	547
31 0740 0042 08	Gulf & Western	30103599 Inorganic Pigment Digester		112 ft	6 km SE (5)	25	547
09					12 km SW (7)	3	547
10					6 km SW (28)	3	547
11						3	547
31 1760 0229 07	Mobil	10200401 Residual Boiler		226 ft	7 km NW (34)	108	508
39 7160 1511 09	Gulf Oil	30600101 Oil-Fired Process Heater		140 ft	5 km SW (5) 11 km S (8)	147	492
39 7160 1501 23	Atlantic Richfield	30600101 Oil-Fired Process Heater		135 ft	4 km SW (5) 10 km S (8) 10 km W (28)	36	472
39 7160 4904 06	Phil. Elec. Chistian Street	10100401 Residual Boiler		255 ft	2 km NW (5) 11 km SW (7)	15	462
01				227 ft	7 km SE (8) 9 km NW (28)	19	458
39 7160 1511 03	Gulf Oil	30600101 Oil-Fired Process Heater		150 ft	5 km SW (5) 11 km S (8) 12 km N (34)	44	449

Table 2 - Continued

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
31 1760 0250 01	Atlantic City Electric	10200401 Residual Boiler		150 ft.	11 km NW (34)	44	435
39 7160 1501 22	Atlantic Richfield	30600101 Oil Fired Process Heater		46 ft.	4 km SW (5) 10 km S (8) 10 km W (28)	41	396
39 7160 4904 02	Phila. Electric Christian Street	10100401 Residual Boiler		227 ft.	2 km NW (5) 11 km SW (7) 7 km SE (8) 9 km NW (28)	16	384
39 7160 1501 55	Atlantic Richfield	30600101 Oil-Fired Process Heater		110 ft.	4 km SW (5) 10 km S (8) 10 km W (28)	22	380
39 7160 1501 26	Atlantic Richfield	30600102 Gas-Fired Process Heater		130 ft.	4 km SW (5) 10 km S (8) 10 km W (28)	9	371
31 1760 0229 03	Mobil	10200401 Residual Boiler		210 ft.	7 km NW (34)	72	335
31 1760 0229 04	Mobil	10200401 Residual Boiler		210 ft.	7 km NW (34)	71	335
31 0740 0470 10	Harshaw Chemical	19999999 Antimony Roasting		285 ft.	6 km SE (5) 12 km SW (7)	11	315
11					6 km SW (28) 12 km NE (34)	11	315

Table 2 - Continued

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
39 7160 1566 01	Container Corp.	10200401 Residual Boiler		175 ft	4 km N (8)	32	316
02				175 ft	4 km N (8)	32	316
39 7160 1501 54	Atlantic Richfield	30600101 Oil-Fired Process Heater		173 ft	See Above	29	290
24				130 ft		19	287
39 7160 1588 23	National Sugar	10200401 Residual Boiler		201 ft	5 km NE (5) 6 km SW (7)	27	272
24					9 km SE (8) 6 km NW (28)	27	272
31 1760 0229 01	Mobil Oil Corp.	10200401 Residual Boiler		210 ft	7 km NW (34)	58	271
02				210 ft		57	270
33		19999999 Secondary Fuel Burning		140 ft		80	254
39 7160 1501 49	Atlantic Richfield	10200401 Residual Boiler		80 ft	See Above	24	252
39 7160 4905 01	Phila. Electric S. Del. Ave.	10100401 Residual Boiler		275 ft	3 km SE (5) 10 km SW (7)	--	241
02				275 ft	5 km SW (28)	--	241
03				275 ft		--	241
04				275 ft		--	241
39 7160 3871 01	Mrs. Paul's Kitchens	10200502 Distillate Oil Boiler		40 ft	6 km NW (7) 9 km (SW (12)	20	233

Table 2 - Continued

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
31 0740 0442 31	Gulf & Western	30599999 Rotary Calcimer		75 ft	See Above	13	224
39 7160 1501 47	Atlantic Richfield	10200401 Residual Boiler		80 ft	See Above	20	210
48						20	210
39 7160 4903 11	Phila. Electric N. Del. Ave.	10100401 Residual Boiler		172 ft	10 km NE (5) 0.5 km W (7)	2	215
12				172 ft	7 km N (28)	2	215
31 1760 0229 38	Mobil Oil	19999999 Secondary Fuel Burner		110 ft	See Above	66	209
41				120 ft		65	208
42				120 ft		65	208
31 0660 0442 01	Combustion Engr. Inc.	10200401 Direct Fire Glass Furnace		194 ft	8 km NE (7) 6 km S (12)	28	205
31 1760 0229 27	Mobil Oil	19999999 Secondary Fuel Burner		120 ft	See Above	91	187
31 0740 0442 47	Gulf & Western	19999999 Secondary Fuel Burner		97 ft	See Above	39	182
39 2360 0019 01	Westinghouse Electric	10200401 Residual Boiler		175 ft	13 km SW (5) 11 km NW (34)	17	182
31 1760 0229 43	Mobil	19999999 Secondary Fuel Burner		88 ft	See Above	55	180

Table 2 - Continued

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
39 7160 1551 06	Allied Chemical	10200401 Residual Boiler		137 ft	11 km NE (5) 2 km N (7)	22	176
08				133 ft	9 km SE (12) 9 km N (28)	31	172
39 7160 9702 10	U.S. Naval Base	10200401 Residual Boiler		90 ft	5 km SW (5) 15 km SW (7)	17	173
09		10200401		90 ft		17	168
08		10200401		90 ft		17	168
07		10200401		90 ft		17	168
06		10200401		90 ft		17	168
31 1760 0229 36	Mobil Oil	19999999 Secondary Fuel Burning		140 ft	See Above	51	161
39 2360 0019 02	Westinghouse Electric	10200401 Residual Boiler		175 ft	See Above	14	160
31 1760 0225 03	Texaco Inc	59999999 Secondary Incineration		250 ft	See Above	--	156
04		30600999		250 ft		--	156
31 1760 0229 06	Mobil Oil	10200401 Residual Boiler		226 ft	See Above	32	152
39 6000 0057 04	Simpson Paper	10200401 Residual Boiler		175 ft	7 km NW (8)	13	147
39 7160 9504 01	E.C. Incinerator	50100101 Multiple Chamber Municipal		123 ft	4 km NE (5) 6 km SW (7) 9 km SE (8) 6 km NW (28)	124	114

Table 2 - Continued

Source ID	Company Name	Process Description	Control Equipment & Eff.	Stack Height (ft)	Location With Respect to Nearest Monitor(s)	TSP (TPY)	SO_2 (TPY)
39 7160 9505 01	N.W. Incinerator	50100101 Multiple Chamber Municipal		140 ft	4 km NW (8)	284	135
02				140 ft	4 km NW (8)	284	135

TABLE 3

PROCESSES REPRESENTED BY SOURCES IN THE PHILADELPHIA AQCR

Process	Remarks
Bituminous Coal-Fired Boilers	
Gas Process Heaters	
Fluid Catalytic Crackers	
Residual Oil-Fired Boilers	
Sulfuric Acid Absorber	
Sulfur Recovery Units	
Oil-Fired Process Heaters	
Inorganic Pigment Digestor	Only one source
Antimony Roasting	Only one source
Secondary Fuel Burning	
Distillate Oil-Fired Boiler	
Rotary Calciner	Only one source with low stacks
Direct Fire Glass Furnace	Only one source with low emissions
Municipal Incinerator	
Coke Boilers	
Fluid coke	
Coke Oven Door Leaks	Fugitive
Open Hearth	Only one facility
Stone Screening and Conveying	Fugitive
Lime Storage Piles	Fugitive
Sinter Plant	Only one facility
Ship Loading	Fugitive
PVC and Copolymers	Fugitive
Electric Arc Furnaces	Only one facility

TABLE 4

PRIORITIZED LIST OF SOURCES SELECTED FOR SAMPLING

Priority	Source ID	Name of Source	Actual Annual Emissions Part. (TPY)	Actual Annual Emissions SO_2 (TPY)	Reasons for Selection
1	39-2360-0014-02	Phila. Electric (Eddy)	5437	30,276	1. Source is #1 for TSP & SO_2 2. Only 11 km from monitor 3. Bituminous coal boilers
	31-2980-0461-01	Public Service E & G[c]	526	12,397	1. High TSP & SO_2 2. Bitum. Coal boiler
	39-7160-1511-83/84	Gulf Oil[b]	90	797	1. 5 km from monitor 2. High SO_2 3. Resid. Oil boilers
	85/80		79	674	
	81/82		79	674	
			70	610	
			70	610	
			70	610	
2	39-7160-4904-03	Phil. Elec., Christian St.	47	972	1. 2 km from monitor 2. High SO_2 3. Resid. Oil boiler
3	08-0180-0016-17	Getty Oil	1953	9,636	1. #2 for TSP, #9 for SO_2 2. Rep. of fluid cat. cracker
	31-1760-0229-75	Mobil Oil[a]	27	2,466	1. 7 km from monitor 2. High SO_2 3. Fluid Cat. Cracker
4	39-7160-1501-25	Atlantic Richfield			1. High SO_2 2. 4 km from monitor 3. Fluid Cat. Cracker
	39-7160-1511-07/09	Gulf Oil[b]	183	1,781	1. 5 km from monitor 2. High SO_2 3. Oil-fired process heater
			147	492	

Table 4 - Continued

Priority	Source ID	Name of Source	Actual Annual Emissions Part. (TPY)	Actual Annual Emissions SO_2 (TPY)	Reasons for Selection
5	08-0180-0016-18	Getty Oil	1420	11,794	1. #9 for TSP, #5 for SO_2 2. Rep. of em from fluid coke
	31-1760-0229-27	Mobil Oil[a]	91	187	1. 7 km from monitor 2. High TSP 3. Secondary fuel burner 4. # of similar srcs at plant
6	08-0180-0008-02/01	Del. P & L	95	14,787	1. High SO_2 2. Coke boilers
	03		68	9,992	
			56	8,083	
7	39-7160-9505-01/02	N.W. Incinerator	284	135	1. 4 km from monitor 2. High TSP 3. Mun. incinerator
			284	135	
8	39-7160-9504-01	E. C. Incinerator	124	114	1. High TSP 2. 4 km from monitor 3. Mun. incinerator
9	08-0180-0019-04	Phoenix Steel	605	0	1. High TSP 2. Rep. of electric arc furn.
10	31-1760-0223-05	DuPont	28	2,101	1. 12 km from monitor 2. High SO_2 3. H_2SO_4 absorber
11	08-0180-0016-19	Getty Oil	---	4,368	1. High SO_2 2. Sulfur Recovery Unit
12	31-1760-0225-05	Texaco	---	1,971	1. High SO_2 2. 7 km from monitor 3. Sulfur recov. unit
	39-7160-1511-60	Gulf Oil[b]	---	2,136	1. 5 km from monitor 2. High SO_2 3. Gas process heaters

Table 4 - Continued

Priority	Source ID	Name of Source	Actual Annual Emissions Part. (TPY)	Actual Annual Emissions SO_2 (TPY)	Reasons for Selection
13	31-0740-0442-08	Gulf & Western	25	547	1. 6 km from monitors 2. High SO_2 3. Inorganic Pigment Digestor
14	31-0740-0470-10/11	Harshaw Chemical	11 11	315 315	1. 6 km from monitor 2. High SO_2 3. Antimony roasting
	39-1200-0020-21	USS Fairless[d]	1899	1,244	1. High TSP and SO_2 2. Rep of open hearth
	39-1200-0020-13/09	USS Fairless[d]	1826 1734	1,608 1,527	1. High TSP & SO_2 2. Rep of sinter plant

[a] Mobil Oil is reluctant to particpate in program
[b] Gulf Oil only has sampling ports on its FCC unit which is down.
[c] Public Service on strike.
[d] U.S. Steel sintering plant and open hearth furnaces are shut down.

TABLE 5

ALTERNATE SOURCES REPRESENTATIVE OF IMPORTANT PROCESSES

Priority	Source ID	Name of Source	Actual Annual Emissions Part. (TPY)	Actual Annual Emissions SO_2 (TPY)	Reasons for Selection
	Butuminous Coal-Fired Boilers				
15	39-1660-0023-01	Phil Elec (Cromby)	1182	14,542	1. High TSP & SO_2 2. Only other coal-fired boilers
	Gas Process Heaters				
16	39-7160-1501-27	ARCO	--	3,419	1. High SO_2
	Fluid Catalytic Crackers				
17	39-2369-0025-01	Sun Oil	--	7,189	1. High SO_2 2. 8 km from monitor
18	39-2360-0030-01	BP Oil	223	4,289	1. High SO_2 . 2. 18 km from monitor
	31-1760-0229-76	Mobil Oil[a]	27	2,466	1. High SO_2 2. 7 km from monitor
	Residual Oil-Fired Boilers				
19	39-2360-0014-04/03	Phila. Elec. (Eddy)	19 16	2,466 2,119	1. High SO_2 2. 12 km from monitor
20	39-7160-4901-13/14	Phila. Elec. (Beach Street)	6 6	887 887	1. High SO_2 2. 5 km from monitor
	31-1760-0229-05/07 03/04	Mobil Oil[a]	116 108 72 71	547 508 335 335	1. High SO_2 2. 7 km from monitor

Table 5 - Continued

Priority	Source ID	Name of Source	Actual Annual Emissions Part. (TPY)	Actual Annual Emissions SO_2 (TPY)	Reasons for Selection
21	39-7160-1566-01/02	Container Corp	32 32	316 316	1. High SO_2 2. 4 km from monitor
	Sulfur Recovery Unit				
22	08-0180-0020-01	Stauffer Chem. Co.	--	3,467	1. High SO_2
	Oil-Fired Process Heaters				
23	39-7160-1501-22/55 54/24	ARCO	41 22 29 19	396 380 290 287	1. High SO_2 2. 4 km from monitor
	Gas-Fired Process Heaters				
24	39-7160-1501-27/26	ARCO	-- 9	3,419 371	1. High SO_2 2. 5 km from monitor

[a] Mobil Oil does not wish to participate in program.

APPENDIX B

POINT SOURCE TEST RESULTS

PARTICULATE EMISSION SUMMARY

RUN CODE	DRY GAS VOLUME (SCF)	MOISTURE (%)	ORSAT ANALYSIS (%) CO2	O2	CO	EXHAUST FLOW RATE (SCFM)	STACK TEMP. (F)	ISOKIN-ETIC (%)		CONCENTRATION (GR/SCF) FRONT	TOTAL	EMISSION RATE (LB/HR) FRONT	TOTAL
HCM5/6-1	43.79	3.79	0.0	20.4	0.0	17237.9	88.	99.2					
									PART.....	0.840E-02	0.0	1.2416	0.0
									SO2	0.858E-02	0.0	1.2671	0.0
									SO4	0.605E-03	0.0	0.0894	0.0
HCM5/6-2	43.03	3.71	0.0	20.3	0.0	16996.1	82.	98.9					
									PART.....	0.193E-01	0.0	2.8152	0.0
									SO2	0.408E-03	0.0	0.0594	0.0
									SO4	0.0	0.0	0.0	0.0
HCM5/6-3	48.43	4.66	0.0	20.4	0.0	17684.1	89.	100.3					
									PART.....	0.185E-01	0.0	2.8099	0.0
									SO2	0.155E-02	0.0	0.2348	0.0
									SO4	0.0	0.0	0.0	0.0
BPM5/6-1	39.04	9.45	10.7	7.5	0.0	138866.8	476.	97.7					
									PART.....	0.412E-01	0.0	49.0138	0.0
									SO2	0.233E+00	0.0	277.4634	0.0
									SO4	0.363E-03	0.0	0.4319	0.0
BPM5/6-2	39.68	8.73	10.1	7.3	0.0	138421.9	485.	99.6					
									PART.....	0.354E-01	0.0	42.0373	0.0
									SO2	0.241E+00	0.0	286.2500	0.0
									SO4	0.175E-03	0.0	0.2072	0.0
BPM5/6-3	39.63	8.60	10.0	8.0	0.0	139319.6	486.	98.8					
									PART.....	0.546E-01	0.0	65.2374	0.0
									SO2	0.242E+00	0.0	289.2529	0.0
									SO4	0.144E-03	0.0	0.1717	0.0
ACM5/6-1	62.19	0.17	2.1	11.4	0.0	67468.8	186.	100.0					

PARTICULATE EMISSION SUMMARY

RUN CODE	DRY GAS VOLUME (SCF)	MOISTURE (%)	ORSAT ANALYSIS (%) CO2	O2	CO	EXHAUST FLOW RATE (SCFM)	STACK TEMP. (F)	ISOKINETIC (%)		CONCENTRATION (GR/SCF) FRONT	TOTAL	EMISSION RATE (LB/HR) FRONT	TOTAL
									PART.....	0.745E-01	0.0	43.0700	0.0
									SO2	0.609E+00	0.0	352.0911	0.0
									SO4	0.362E-02	0.0	2.0905	0.0
ACM5/6-2	61.75	0.01	2.1	11.4	0.0	66865.9	188.	100.2					
									PART.....	0.257E+00	0.0	147.1365	0.0
									SO2	0.557E+00	0.0	319.0364	0.0
									SO4	0.850E-02	0.0	4.8735	0.0
ACM5/6-3	61.69	0.21	2.1	11.4	0.0	66875.8	180.	100.1					
									PART.....	0.871E-01	0.0	49.9196	0.0
									SO2	0.552E+00	0.0	316.5867	0.0
									SO4	0.200E-02	0.0	1.1466	0.0

PARTICULATE EMISSION DATA REPORT

HARSHAW CHEMICAL PHILA TEM TEST HCM5/6-1

BAROMETRIC PRESSURE (IN. HG)	30.10
AVG. ORIFICE PRES. DROP (IN. H2O)	1.020
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	47.315
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	46.842
AVG. METER TEMP. (F)	109.6
VOLUME OF DRY GAS SAMPLED (DSCF)	43.791
TOTAL H2O COLLECTED (ML)	36.5
VOLUME OF H2O COLLECTED (SCF)	1.72
% MOISTURE IN STACK GAS BY VOLUME	3.79
MOLE FRACTION OF DRY GAS	0.962
% CARBON DIOXIDE	0.0
% OXYGEN	20.37
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.81
MOLECULAR WEIGHT OF STACK GAS	28.41
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	20.1
AVERAGE STACK GAS TEMPERATURE (F)	88.4
ABSOLUTE STACK GAS PRESSURE (IN. HG)	30.10
STACK GAS FLOW RATE (ACFM)	18496.
STACK GAS FLOW RATE (DSCFM)	17238.
NET TIME OF TEST (MIN.)	80.
STACK DIAMETER (IN.)	53.0
SAMPLING NOZZLE DIAMETER (IN.)	0.300
% ISOKINETIC	99.2
% EXCESS AIR	3122.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	23.90	0.0	0.840E-02	0.0	1.2416	0.0
SO2 ...	24.39	0.0	0.858E-02	0.0	1.2671	0.0
SO4 ...	1.72	0.0	0.605E-03	0.0	0.0894	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

ENGINEERING SCIENCE INC.
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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

HARSHAW CHEMICAL PHILA TEM TEST HCM5/6-1

BAROMETRIC PRESSURE (KPA)	101.930
AVG. ORIFICE PRES. DROP (KPA)	0.2541
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.346
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.326
AVG. METER TEMP. (C)	43.1
VOLUME OF DRY GAS SAMPLED (NM3)	1.240
TOTAL H2O COLLECTED (ML)	36.5
VOLUME OF H2O COLLECTED (NM3)	0.049
% MOISTURE IN STACK GAS BY VOLUME	3.79
MOLE FRACTION OF DRY GAS	0.962
% CARBON DIOXIDE	0.0
% OXYGEN	20.37
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.81
MOLECULAR WEIGHT OF STACK GAS	28.41
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	6.13
AVERAGE STACK GAS TEMPERATURE (C)	31.3
ABSOLUTE STACK GAS PRESSURE (KPA)	101.930
STACK GAS FLOW RATE (M3/M)	523.74
STACK GAS FLOW RATE (NM3/M)	488.11
NET TIME OF TEST (MIN.)	80.
STACK DIAMETER (M)	1.346
SAMPLING NOZZLE DIAMETER (CM)	0.762
% ISOKINETIC	99.2
% EXCESS AIR	3122.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	23.90	0.0	19.233	0.0	0.5632	0.0
SO2 ...	24.39	0.0	19.628	0.0	0.5747	0.0
SO4 ...	1.72	0.0	1.384	0.0	0.0405	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

MARSHAN CHEMICAL PHILA TEM TEST HCM5/6-2

BAROMETRIC PRESSURE (IN. HG)	30.07
AVG. ORIFICE PRES. DROP (IN. H2O)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	47.006
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	46.536
AVG. METER TEMP. (F)	115.3
VOLUME OF DRY GAS SAMPLED (DSCF)	43.027
TOTAL H2O COLLECTED (ML)	35.1
VOLUME OF H2O COLLECTED (SCF)	1.66
% MOISTURE IN STACK GAS BY VOLUME	3.71
MOLE FRACTION OF DRY GAS	0.963
% CARBON DIOXIDE	0.0
% OXYGEN	20.33
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.81
MOLECULAR WEIGHT OF STACK GAS	28.41
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	19.6
AVERAGE STACK GAS TEMPERATURE (F)	82.4
ACSOLUTE STACK GAS PRESSURE (IN. HG)	30.07
STACK GAS FLOW RATE (ACFM)	18041.
STACK GAS FLOW RATE (DSCFM)	16996.
NET TIME OF TEST (MIN.)	80.
STACK DIAMETER (IN.)	53.0
SAMPLING NOZZLE DIAMETER (IN.)	0.300
% ISOKINETIC	98.9
% EXCESS AIR	2892.4

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	54.00	0.0	0.193E-01	0.0	2.8152	0.0
SO2 :::	1.14	0.0	0.408E-03	0.0	0.0594	0.0
SO4 :::	0.0	0.0	0.0	0.0	0.0	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

MARSHALL CHEMICAL PHILA TEM TEST HCM5/6-2

BAROMETRIC PRESSURE (KPA)	101.828
AVG. ORIFICE PRES. DROP (KPA)	0.2441
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.331
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.318
AVG. METER TEMP. (C)	46.3
VOLUME OF DRY GAS SAMPLED (NM3)	1.218
TOTAL H2O COLLECTED (ML)	35.1
VOLUME OF H2O COLLECTED (NM3)	0.047
% MOISTURE IN STACK GAS BY VOLUME	3.71
MOLE FRACTION OF DRY GAS	0.963
% CARBON DIOXIDE	0.0
% OXYGEN	20.33
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.81
MOLECULAR WEIGHT OF STACK GAS	28.41
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	5.98
AVERAGE STACK GAS TEMPERATURE (C)	28.0
ABSOLUTE STACK GAS PRESSURE (KPA)	101.828
STACK GAS FLOW RATE (M3/M)	510.84
STACK GAS FLOW RATE (NM3/M)	481.26
NET TIME OF TEST (MIN.)	80.
STACK DIAMETER (M)	1.346
SAMPLING NOZZLE DIAMETER (CM)	0.762
% ISOKINETIC	98.9
% EXCESS AIR	2892.4

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	54.00	0.0	44.228	0.0	1.2769	0.0
SO2 ...	1.14	0.0	0.934	0.0	0.0270	0.0
SO4 ...	0.0	0.0	0.0	0.0	0.0	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

HERSHEY CHEMICAL PHILA TEM TEST HCM5/6-3

BAROMETRIC PRESSURE (IN. HG)	29.86
AVG. ORIFICE PRES. DROP (IN. H2O)	1.090
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	46.146
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	48.655
AVG. METER TEMP. (F)	105.8
VOLUME OF DRY GAS SAMPLED (DSCF)	45.435
TOTAL H2O COLLECTED (ML)	47.0
VOLUME OF H2O COLLECTED (SCF)	2.22
% MOISTURE IN STACK GAS BY VOLUME	4.66
MOLE FRACTION OF DRY GAS	0.953
% CARBON DIOXIDE	0.0
% OXYGEN	20.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.82
MOLECULAR WEIGHT OF STACK GAS	28.31
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	21.0
AVERAGE STACK GAS TEMPERATURE (F)	89.3
ABSOLUTE STACK GAS PRESSURE (IN. HG)	29.86
STACK GAS FLOW RATE (ACFM)	19335.
STACK GAS FLOW RATE (DSCFM)	17684.
NET TIME OF TEST (MIN.)	60.
STACK DIAMETER (IN.)	53.0
SAMPLING NOZZLE DIAMETER (IN.)	0.300
% ISOKINETIC	100.3
% EXCESS AIR	3320.3

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	84.70	0.0	0.165E-01	0.0	2.8099	0.0
SO2 ...	4.57	0.0	0.155E-02	0.0	0.2348	0.0
SO4 ...	0.0	0.0	0.0	0.0	0.0	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

ENGINEERING SCIENCE INC.
WASHINGTON, DC

PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

HARSHAW CHEMICAL PHILA TEM TEST HCM5/6-3

BAROMETRIC PRESSURE (KPA)	101.117
AVG. ORIFICE PRES. DROP (KPA)	0.2715
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.392
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.378
AVG. METER TEMP. (C)	41.0
VOLUME OF DRY GAS SAMPLED (NM3)	1.287
TOTAL H2O COLLECTED (ML)	47.0
VOLUME OF H2O COLLECTED (NM3)	0.063
% MOISTURE IN STACK GAS BY VOLUME	4.66
MOLE FRACTION OF DRY GAS	0.953
% CARBON DIOXIDE	0.0
% OXYGEN	20.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.82
MOLECULAR WEIGHT OF STACK GAS	28.31
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	6.41
AVERAGE STACK GAS TEMPERATURE (C)	31.8
ABSOLUTE STACK GAS PRESSURE (KPA)	101.117
STACK GAS FLOW RATE (M3/M)	547.49
STACK GAS FLOW RATE (NM3/M)	500.74
NET TIME OF TEST (MIN.)	80.
STACK DIAMETER (M)	1.346
SAMPLING NOZZLE DIAMETER (CM)	0.762
% ISOKINETIC	100.3
% EXCESS AIR	3320.3

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	54.70	0.0	42.427	0.0	1.2745	0.0
SO2 ...	4.57	0.0	3.545	0.0	0.1065	0.0
SO4 ...	0.0	0.0	0.0	0.0	0.0	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

BE CIL CO PHILA TEM TEST BPMS/6-1

BAROMETRIC PRESSURE (IN. HG)	29.93
AVG. ORIFICE PRES. DROP (IN. H2O)	1.080
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	41.481
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	41.066
AVG. METER TEMP. (F)	97.1
VOLUME OF DRY GAS SAMPLED (DSCF)	39.037
TOTAL H2O COLLECTED (ML)	86.3
VOLUME OF H2O COLLECTED (SCF)	4.07
% MOISTURE IN STACK GAS BY VOLUME	9.45
MOLE FRACTION OF DRY GAS	0.906
% CARBON DIOXIDE	10.67
% OXYGEN	7.53
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	30.01
MOLECULAR WEIGHT OF STACK GAS	28.87
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	49.9
AVERAGE STACK GAS TEMPERATURE (F)	476.6
ABSOLUTE STACK GAS PRESSURE (IN. HG)	29.90
STACK GAS FLOW RATE (ACFM)	271934.
STACK GAS FLOW RATE (DSCFM)	138867.
NET TIME OF TEST (MIN.)	72.
STACK DIAMETER (IN.)	129.0
SAMPLING NOZZLE DIAMETER (IN.)	0.258
% ISOKINETIC	97.7
% EXCESS AIR	53.5

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	104.40	0.0	0.412E-01	0.0	49.0138	0.0
SO2 ...	591.00	0.0	0.233E+00	0.0	277.4634	0.0
SO4 ...	0.92	0.0	0.363E-03	0.0	0.4319	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

PE OIL CO PHILA TEM TEST BPM5/6-1

BAROMETRIC PRESSURE (KPA)	101.354
AVG. ORIFICE PRES. DROP (KPA)	0.2690
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.175
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.163
AVG. METER TEMP. (C)	36.2
VOLUME OF DRY GAS SAMPLED (NM3)	1.105
TOTAL H2O COLLECTED (ML)	86.3
VOLUME OF H2O COLLECTED (NM3)	0.115
% MOISTURE IN STACK GAS BY VOLUME	9.45
MOLE FRACTION OF DRY GAS	0.906
% CARBON DIOXIDE	10.67
% OXYGEN	7.83
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	30.01
MOLECULAR WEIGHT OF STACK GAS	28.87
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	15.22
AVERAGE STACK GAS TEMPERATURE (C)	246.5
ABSOLUTE STACK GAS PRESSURE (KPA)	101.253
STACK GAS FLOW RATE (M3/M)	7700.09
STACK GAS FLOW RATE (NM3/M)	3932.15
NET TIME OF TEST (MIN.)	72.
STACK DIAMETER (M)	3.277
SAMPLING NOZZLE DIAMETER (CM)	0.655
% ISOKINETIC	97.7
% EXCESS AIR	53.5

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	104.40	0.0	94.246	0.0	22.2322	0.0
SO2 ...	591.00	0.0	533.518	0.0	125.8546	0.0
SO4 ...	0.92	0.0	0.831	0.0	0.1959	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

EF DIL CO PHILA TEM TEST 8PM5/6-2

BAROMETRIC PRESSURE (IN. HG)	29.93
AVG. ORIFICE PRES. DROP (IN. H2O)	1.070
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	42.457
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	42.032
AVG. METER TEMP. (F)	101.0
VOLUME OF DRY GAS SAMPLED (DSCF)	39.677
TOTAL H2O COLLECTED (ML)	80.4
VOLUME OF H2O COLLECTED (SCF)	3.79
% MOISTURE IN STACK GAS BY VOLUME	8.73
MOLE FRACTION OF DRY GAS	0.913
% CARBON DIOXIDE	10.13
% OXYGEN	7.83
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	29.93
MOLECULAR WEIGHT OF STACK GAS	28.89
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	49.9
AVERAGE STACK GAS TEMPERATURE (F)	485.3
ABSOLUTE STACK GAS PRESSURE (IN. HG)	29.90
STACK GAS FLOW RATE (ACFM)	271706.
STACK GAS FLOW RATE (DSCFM)	138422.
NET TIME OF TEST (MIN.)	72.
STACK DIAMETER (IN.)	129.0
SAMPLING NOZZLE DIAMETER (IN.)	0.258
% ISOKINETIC	99.6
% EXCESS AIR	56.6

PARAMETER		MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART	...	91.30	0.0	0.354E-01	0.0	42.0373	0.0
SO2	...	621.70	0.0	0.241E+00	0.0	286.2500	0.0
SO4	...	0.45	0.0	0.175E-03	0.0	0.2072	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

PF FIL CO PHILA TEM TEST BPH5/6-2

BAROMETRIC PRESSURE (KPA)	101.354
AVG. ORIFICE PRES. DROP (KPA)	0.2665
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.202
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.190
AVG. METER TEMP. (C)	38.3
VOLUME OF DRY GAS SAMPLED (NM3)	1.123
TOTAL H2O COLLECTED (ML)	80.4
VOLUME OF H2O COLLECTED (NM3)	0.107
% MOISTURE IN STACK GAS BY VOLUME	8.73
MOLE FRACTION OF DRY GAS	0.913
% CARBON DIOXIDE	10.13
% OXYGEN	7.83
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	29.93
MOLECULAR WEIGHT OF STACK GAS	28.89
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	15.21
AVERAGE STACK GAS TEMPERATURE (C)	251.8
ABSOLUTE STACK GAS PRESSURE (KPA)	101.253
STACK GAS FLOW RATE (M3/M)	7693.62
STACK GAS FLOW RATE (NM3/M)	3919.55
NET TIME OF TEST (MIN.)	72.
STACK DIAMETER (M)	3.277
SAMPLING NOZZLE DIAMETER (CM)	0.655
% ISOKINETIC	99.6
% EXCESS AIR	56.6

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	91.30	0.0	81.091	0.0	19.0677	0.0
SO2 ...	621.70	0.0	552.183	0.0	129.8401	0.0
SO4 ...	0.45	0.0	0.400	0.0	0.0940	0.0

STANDARD CONDITIONS 68 DEG F 29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

EP OIL CO PHILA TEM TEST BPM5/6-3

BAROMETRIC PRESSURE (IN. HG)	29.93
AVG. ORIFICE PRES. DROP (IN. H2O)	1.080
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	42.237
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	41.815
AVG. METER TEMP. (F)	98.8
VOLUME OF DRY GAS SAMPLED (DSCF)	39.628
TOTAL H2O COLLECTED (ML)	79.0
VOLUME OF H2O COLLECTED (SCF)	3.73
% MOISTURE IN STACK GAS BY VOLUME	8.60
MOLE FRACTION OF DRY GAS	0.914
% CARBON DIOXIDE	10.00
% OXYGEN	8.00
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	29.92
MOLECULAR WEIGHT OF STACK GAS	28.89
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	50.2
AVERAGE STACK GAS TEMPERATURE (F)	486.5
ABSOLUTE STACK GAS PRESSURE (IN. HG)	29.90
STACK GAS FLOW RATE (ACFM)	273419.
STACK GAS FLOW RATE (DSCFM)	139320.
NET TIME OF TEST (MIN.)	72.
STACK DIAMETER (IN.)	129.0
SAMPLING NOZZLE DIAMETER (IN.)	0.258
% ISOKINETIC	98.8
% EXCESS AIR	58.6

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	140.60	0.0	0.546E-01	0.0	65.2374	0.0
SO2 ...	623.40	0.0	0.242E+00	0.0	289.2529	0.0
SO4 ...	0.37	0.0	0.144E-03	0.0	0.1717	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

BE LIL CO PHILA TEM TEST BPM5/6-3

BAROMETRIC PRESSURE (KPA)	101.354
AVG. ORIFICE PRES. DROP (KPA)	0.2690
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.196
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.990
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.184
AVG. METER TEMP. (C)	37.1
VOLUME OF DRY GAS SAMPLED (NM3)	1.122
TOTAL H2O COLLECTED (ML)	79.0
VOLUME OF H2O COLLECTED (NM3)	0.106
% MOISTURE IN STACK GAS BY VOLUME	8.60
MOLE FRACTION OF DRY GAS	0.914
% CARBON DIOXIDE	10.00
% OXYGEN	8.00
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	29.92
MOLECULAR WEIGHT OF STACK GAS	28.89
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	15.30
AVERAGE STACK GAS TEMPERATURE (C)	252.8
ABSOLUTE STACK GAS PRESSURE (KPA)	101.253
STACK GAS FLOW RATE (M3/M)	7742.12
STACK GAS FLOW RATE (NM3/M)	3944.97
NET TIME OF TEST (MIN.)	72.
STACK DIAMETER (M)	3.277
SAMPLING NOZZLE DIAMETER (CM)	0.655
% ISOKINETIC	98.8
% EXCESS AIR	58.6

PARAMETER		MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART	...	140.60	0.0	125.033	0.0	29.5910	0.0
SO2	...	623.40	0.0	554.380	0.0	131.2022	0.0
SO4	...	0.37	0.0	0.329	0.0	0.0779	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

ALLIED CHEMICAL ACID PLANT ACHS/6-1

BAROMETRIC PRESSURE (IN. HG)	30.34
AVG. ORIFICE PRES. DROP (IN. H2O)	1.420
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	65.943
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	64.624
AVG. METER TEMP. (F)	98.3
VOLUME OF DRY GAS SAMPLED (DSCF)	62.188
TOTAL H2O COLLECTED (ML)	2.3
VOLUME OF H2O COLLECTED (SCF)	0.11
% MOISTURE IN STACK GAS BY VOLUME	0.17
MOLE FRACTION OF DRY GAS	0.998
% CARBON DIOXIDE	2.10
% OXYGEN	11.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.79
MOLECULAR WEIGHT OF STACK GAS	28.77
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	68.7
AVERAGE STACK GAS TEMPERATURE (F)	185.7
ABSOLUTE STACK GAS PRESSURE (IN. HG)	30.57
STACK GAS FLOW RATE (ACFM)	80894.
STACK GAS FLOW RATE (DSCFM)	67469.
NET TIME OF TEST (MIN.)	96.
STACK DIAMETER (IN.)	60.0
SAMPLING NOZZLE DIAMETER (IN.)	0.186
% ISOKINETIC	100.0
% EXCESS AIR	99.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	300.80	0.0	0.745E-01	0.0	43.0700	0.0
SO2 ...	2459.00	0.0	0.609E+00	0.0	352.0511	0.0
SO4 ...	14.60	0.0	0.362E-02	0.0	2.0905	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

ALLIED CHEMICAL ACID PLANT ACM5/6-1

BAROMETRIC PRESSURE (KPA)	102.743
AVG. ORIFICE PRES. DROP (KPA)	0.3537
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.867
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.830
AVG. METER TEMP. (C)	36.8
VOLUME OF DRY GAS SAMPLED (NM3)	1.761
TOTAL H2O COLLECTED (ML)	2.3
VOLUME OF H2O COLLECTED (NM3)	0.003
% MOISTURE IN STACK GAS BY VOLUME	0.17
MOLE FRACTION OF DRY GAS	0.998
% CARBON DIOXIDE	2.10
% OXYGEN	11.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.79
MOLECULAR WEIGHT OF STACK GAS	28.77
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	20.93
AVERAGE STACK GAS TEMPERATURE (C)	85.4
ABSOLUTE STACK GAS PRESSURE (KPA)	103.522
STACK GAS FLOW RATE (M3/M)	2290.60
STACK GAS FLOW RATE (NM3/M)	1910.45
NET TIME OF TEST (MIN.)	96.
STACK DIAMETER (M)	1.524
SAMPLING NOZZLE DIAMETER (CM)	0.472
% ISOKINETIC	100.0
% EXCESS AIR	99.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	300.80	0.0	170.456	0.0	19.5361	0.0
SO2 ...	2459.00	0.0	1393.458	0.0	159.7050	0.0
SO4 ...	14.60	0.0	8.273	0.0	0.9482	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

ALLIED CHEMICAL ACID PLANT ACM5/6-2

BAROMETRIC PRESSURE (IN. HG)	30.34
AVG. ORIFICE PRES. DROP (IN. H2O)	1.390
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	65.750
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	64.435
AVG. METER TEMP. (F)	100.6
VOLUME OF DRY GAS SAMPLED (DSCF)	61.747
TOTAL H2O COLLECTED (ML)	0.1
VOLUME OF H2O COLLECTED (SCF)	0.00
% MOISTURE IN STACK GAS BY VOLUME	0.01
MOLE FRACTION OF DRY GAS	1.000
% CARBON DIOXIDE	2.10
% OXYGEN	11.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.79
MOLECULAR WEIGHT OF STACK GAS	28.79
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	68.2
AVERAGE STACK GAS TEMPERATURE (F)	187.9
ABSOLUTE STACK GAS PRESSURE (IN. HG)	30.57
STACK GAS FLOW RATE (ACFM)	80309.
STACK GAS FLOW RATE (DSCFM)	66866.
NET TIME OF TEST (MIN.)	96.
STACK DIAMETER (IN.)	60.0
SAMPLING NOZZLE DIAMETER (IN.)	0.186
% ISOKINETIC	100.2
% EXCESS AIR	99.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	1029.60	0.0	0.257E+00	0.0	147.1345	0.0
SO2 ...	2232.30	0.0	0.557E+00	0.0	319.0364	0.0
SO4 ...	34.10	0.0	0.850E-02	0.0	4.8735	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

ALLIED CHEMICAL ACID PLANT ACM5/6-2

BAROMETRIC PRESSURE (KPA)	102.743
AVG. ORIFICE PRES. DROP (KPA)	0.3462
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.862
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.825
AVG. METER TEMP. (C)	36.1
VOLUME OF DRY GAS SAMPLED (NM3)	1.748
TOTAL H2O COLLECTED (ML)	0.1
VOLUME OF H2O COLLECTED (NM3)	0.000
% MOISTURE IN STACK GAS BY VOLUME	0.01
MOLE FRACTION OF DRY GAS	1.000
% CARBON DIOXIDE	2.10
% OXYGEN	11.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.79
MOLECULAR WEIGHT OF STACK GAS	28.79
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	20.78
AVERAGE STACK GAS TEMPERATURE (C)	86.6
ABSOLUTE STACK GAS PRESSURE (KPA)	103.522
STACK GAS FLOW RATE (M3/M)	2274.03
STACK GAS FLOW RATE (NM3/M)	1893.37
NET TIME OF TEST (MIN.)	96.
STACK DIAMETER (M)	1.524
SAMPLING NOZZLE DIAMETER (CM)	0.472
% ISOKINETIC	100.2
% EXCESS AIR	99.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	1029.50	0.0	587.559	0.0	66.7387	0.0
SO2 ...	2232.30	0.0	1274.024	0.0	144.7117	0.0
SO4 ...	34.10	0.0	19.462	0.0	2.2106	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

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PARTICULATE EMISSION DATA REPORT

ALLIED CHEMICAL ACID PLANT ACM5/6-3

BAROMETRIC PRESSURE (IN. HG)	30.30
AVG. ORIFICE PRES. DROP (IN. H2O)	1.390
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (UNCORRECTED)	65.738
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (DCF) (CORRECTED)	64.423
AVG. METER TEMP. (F)	100.3
VOLUME OF DRY GAS SAMPLED (DSCF)	61.688
TOTAL H2O COLLECTED (ML)	2.7
VOLUME OF H2O COLLECTED (SCF)	0.13
% MOISTURE IN STACK GAS BY VOLUME	0.21
MOLE FRACTION OF DRY GAS	0.998
% CARBON DIOXIDE	2.10
% OXYGEN	11.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.79
MOLECULAR WEIGHT OF STACK GAS	28.77
AVERAGE STACK GAS VELOCITY, STACK COND. (FPS)	67.6
AVERAGE STACK GAS TEMPERATURE (F)	180.2
ABSOLUTE STACK GAS PRESSURE (IN. HG)	30.53
STACK GAS FLOW RATE (ACFM)	79626.
STACK GAS FLOW RATE (DSCFM)	66876.
NET TIME OF TEST (MIN.)	96.
STACK DIAMETER (IN.)	60.0
SAMPLING NOZZLE DIAMETER (IN.)	0.186
% ISOKINETIC	100.1
% EXCESS AIR	99.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (GR/SCF) FRONT	CONCENTRATION (GR/SCF) TOTAL	EMISSION RATE (LB/HR) FRONT	EMISSION RATE (LB/HR) TOTAL
PART ...	348.90	0.0	0.871E-01	0.0	49.9196	0.0
SO2 ...	2212.70	0.0	0.552E+00	0.0	316.5867	0.0
SO4 ...	8.00	0.0	0.200E-02	0.0	1.1446	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

ENGINEERING SCIENCE INC.
WASHINGTON, DC

PARTICULATE EMISSION DATA REPORT
METRIC SYSTEM

ALLIED CHEMICAL ACID PLANT ACM5/6-3

BAROMETRIC PRESSURE (KPA)	102.607
AVG. ORIFICE PRES. DROP (KPA)	0.3462
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (UNCORRECTED)	1.861
DRY GAS METER CORRECTION FACTOR (GAMMA)	0.980
VOLUME OF DRY GAS SAMPLED, METER COND. (M3) (CORRECTED)	1.824
AVG. METER TEMP. (C)	37.9
VOLUME OF DRY GAS SAMPLED (NM3)	1.747
TOTAL H2O COLLECTED (ML)	2.7
VOLUME OF H2O COLLECTED (NM3)	0.004
% MOISTURE IN STACK GAS BY VOLUME	0.21
MOLE FRACTION OF DRY GAS	0.998
% CARBON DIOXIDE	2.10
% OXYGEN	11.40
% CARBON MONOXIDE	0.0
MOLECULAR WEIGHT OF DRY GAS	28.79
MOLECULAR WEIGHT OF STACK GAS	28.77
AVERAGE STACK GAS VELOCITY, STACK COND. (MPS)	20.60
AVERAGE STACK GAS TEMPERATURE (C)	82.3
ABSOLUTE STACK GAS PRESSURE (KPA)	103.386
STACK GAS FLOW RATE (M3/M)	2254.69
STACK GAS FLOW RATE (NM3/M)	1693.66
NET TIME OF TEST (MIN.)	96.
STACK DIAMETER (M)	1.524
SAMPLING NOZZLE DIAMETER (CM)	0.472
% ISOKINETIC	100.1
% EXCESS AIR	99.7

PARAMETER	MASS (IN MILLIGRAMS) FRONT	MASS (IN MILLIGRAMS) TOTAL	CONCENTRATION (MG/NM3) FRONT	CONCENTRATION (MG/NM3) TOTAL	EMISSION RATE (KG/HR) FRONT	EMISSION RATE (KG/HR) TOTAL
PART ...	348.90	0.0	199.317	0.0	22.6430	0.0
SO2 ...	2212.70	0.0	1264.053	0.0	143.6005	0.0
SO4 ...	8.00	0.0	4.570	0.0	0.5192	0.0

STANDARD CONDITIONS *68 DEG F *29.92 IN. HG

ENGINEERING SCIENCE INC.
WASHINGTON, DC

PILAT IMPACTOR DATA REDUCTION

PLANT : HARSHAW CHEMICAL
DATE OF RUN : 7/28/82
RUN NO.: HCA-PS-1
OPERATOR : MARK BINDBEOTEL
LOCATION : ANTIMONY OUTLET
PLATE TYPE : L-COATED

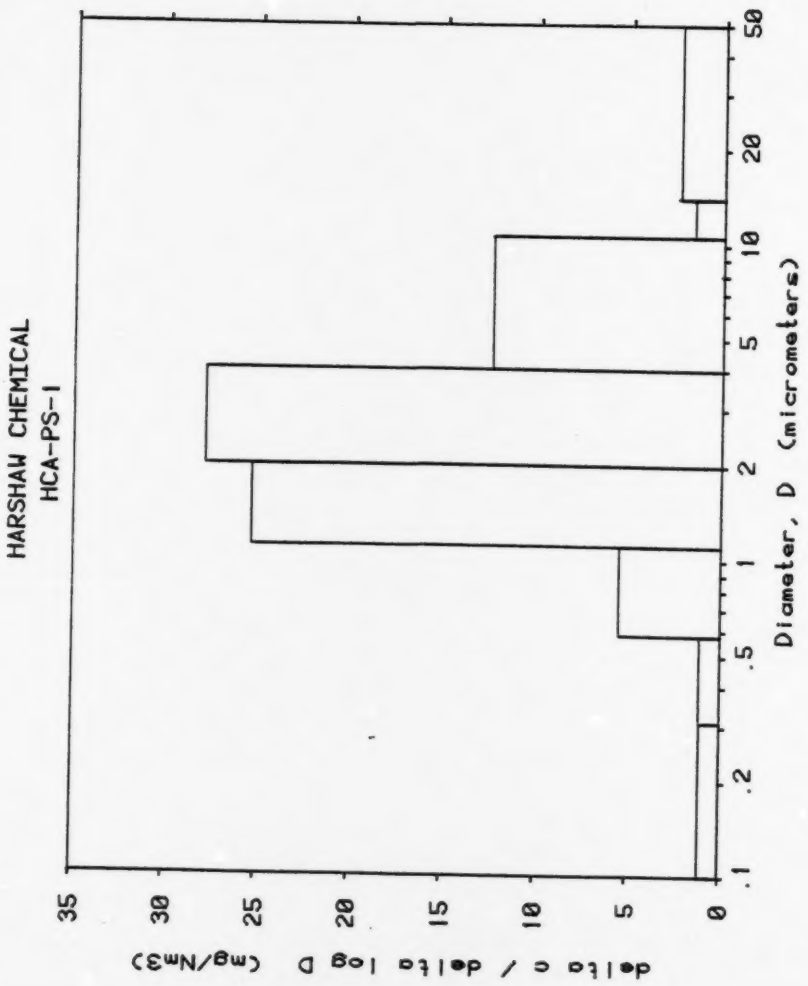
========== FIELD DATA ==========

PITOT C FACTOR : .84
TIME START : 12?15
DELTA P : .12 IN.H20
LENGTH OF RUN : 70 MINS.
METER BOX I.D.: ES-6
AMBIENT TEMP.: 89 F
DELTA H@ : 1.74 IN. H20
BAROMETER : 29.86 IN.HG.
METER Y FACTOR : .99
STACK DIAMETER : 4.42 FT.
DELTA H : 1.87 IN.H20
STACK GAS MW.: 28.4
METER VOLUME : 56.047 CU.FT.
STACK GAS MOISTURE : 4.? %
AVG. METER TEMP.: 110.6 F
STACK TEMP.: 90 F
NOZZLE DIAMETER : .354 IN.
STATIC PRESSURE : .06 IN.H20

========== CALCULATED DATA ==========

20	VELOCITY (FPS)	1008350	DNCF/HR
.807	ACFM	28553	DNCM/HR
51.477	DNCF	1.4	LB/HR (STD)
1.4577	DNCM	.685	KG/HR (STD)
98.2	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	1.9	5.4	100	1.303	14
STAGE 2	.277	.8	94.6	.19	10.6
STAGE 3	7.652	21.9	93.8	5.249	4
STAGE 4	12.234	35	71.9	8.393	2
STAGE 5	9.449	27	37	6.48200001	1.11
STAGE 6	2.252	6.4	10	1.545	.58
STAGE 7	.443	1.3	3.5	.304	.31
FILTER	.787	2.2	2.2	.54	
TOTAL	34.994			24.007	


HARSHAW CHEMICAL
HCA-PS-1
delta σ / delta log D (mg/Nm3)
0
5
10
15
20
25
30
35
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : HARSHAW CHEMICAL

RUN NO.: HCA-PS-2

LOCATION : ANTIMONY OUTLET

DATE OF RUN : 7/28/82

OPERATOR : MARK BINDBEOTEL

PLATE TYPE : L-COATED

FIELD DATA

PITOT C FACTOR : .84

DELTA P : .12 IN.H20

METER BOX I.D.: ES-6

DELTA H@ : 1.74 IN. H20

METER Y FACTOR : .99

DELTA H : 1.09 IN.H20

METER VOLUME : 48.484 CU.FT.

AVG. METER TEMP.: 113.83 F

NOZZLE DIAMETER : .354 IN.

TIME START : 13:43

LENGTH OF RUN : 60 MINS.

AMBIENT TEMP.: 88 F

BAROMETER : 29.8 IN.HG.

STACK DIAMETER : 4.42 FT.

STACK GAS MW.: 28.4

STACK GAS MOISTURE : 4.6 %

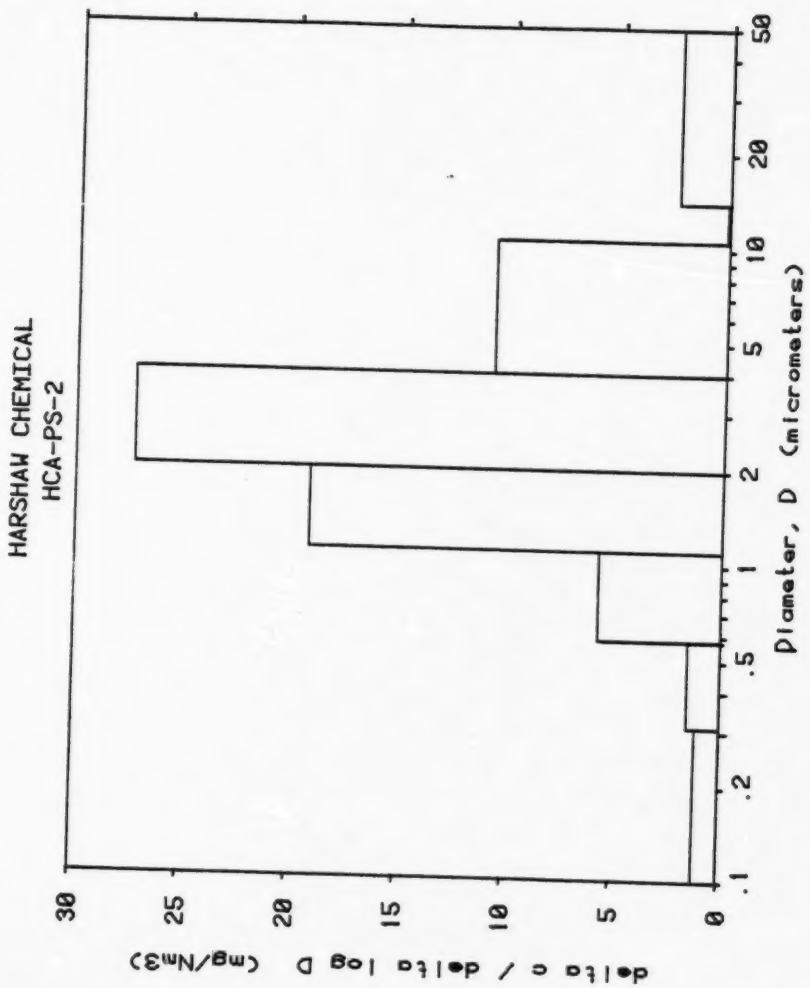
STACK TEMP.: 90.33 F

STATIC PRESSURE : .0544 IN.H20

CALCULATED DATA

20.1	VELOCITY (FPS)	1010205	DNCF/HR
.808	ACFM	28606	DNCM/HR
44.194	DNCF	1.2	LB/HR (STD)
1.2514	DNCM	.616	KG/HR (STD)
98.2	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	1.623	6	100	1.297	14
STAGE 2	.017	.1	94	.014	10.6
STAGE 3	5.681	21.1	93.9	4.54	4
STAGE 4	10.272	38.1	72.8	8.208	2
STAGE 5	6.133	22.8	34.7	4.901	1.11
STAGE 6	2.015	7.5	12	1.61	.58
STAGE 7	.514	1.9	4.5	.411	.31
FILTER	.702	2.6	2.6	.561	
TOTAL	26.957			21.541	


HARSHAW CHEMICAL
HCA-PS-2
delta σ / delta log D (mg/Nm3)
0
5
10
15
20
25
30
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : HARSHAW CHEMICAL

RUN NO.: HCA-PS-3

LOCATION : ANTIMONY OUTLET

DATE OF RUN : 7/28/82

OPERATOR : MARK BINDBEOTEL

PLATE TYPE : ???

FIELD DATA

PITOT C FACTOR : .84

DELTA P : .12 IN.H20

METER BOX I.D.: ES-6

DELTA H@ : 1.74 IN. H20

METER Y FACTOR : .99

DELTA H : 1.89 IN.H20

METER VOLUME : 40.376 CU.FT.

AVG. METER TEMP.: 114.2 F

NOZZLE DIAMETER : .354 IN.

TIME START : 14:55

LENGTH OF RUN : 50 MINS.

AMBIENT TEMP.: 88 F

BAROMETER : 29.8 IN.HG.

STACK DIAMETER : 4.42 FT.

STACK GAS MW.: 28.4

STACK GAS MOISTURE : 4.6 %

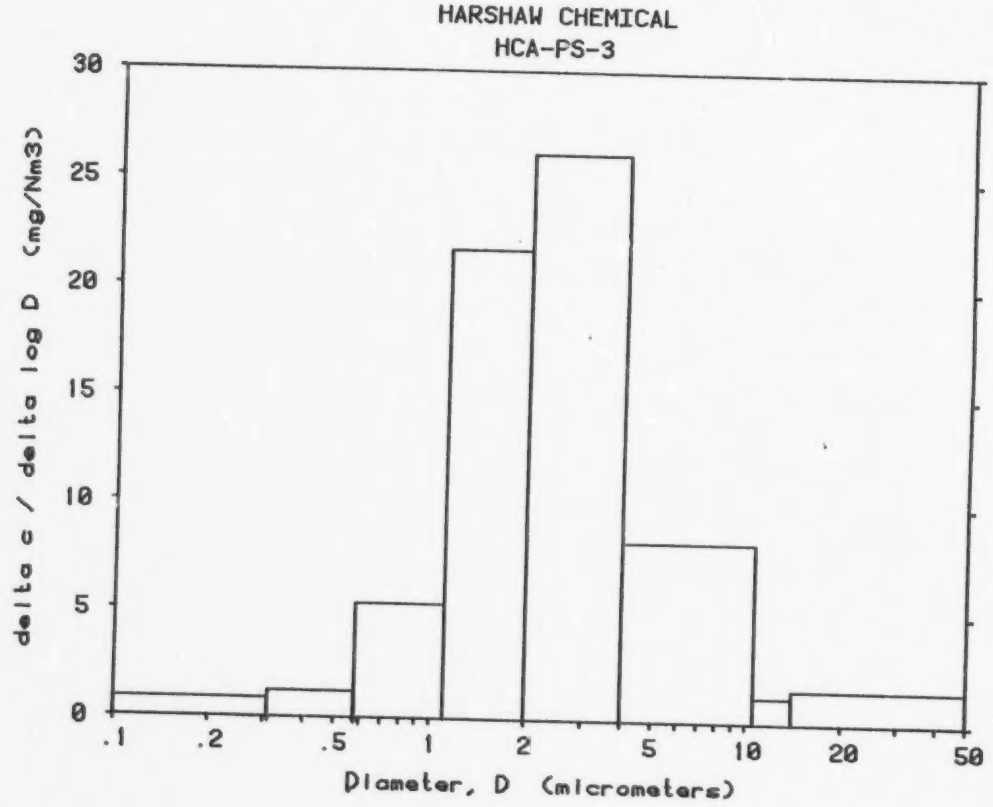
STACK TEMP.: 91 F

STATIC PRESSURE : .0544 IN.H20

CALCULATED DATA

20.1	VELOCITY (FPS)	1009590	DNCF/HR
.808	ACFM	28588	DNCM/HR
36.779	DNCF	1.2	LB/HR (STD)
1.0415	DNCM	.577	KG/HR (STD)
98.1	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	.885	4.2	100	.85	14
STAGE 2	.149	.7	95.8	.143	10.6
STAGE 3	3.65	17.4	95.1	3.505	4
STAGE 4	8.197	39	77.7	7.871	2
STAGE 5	5.781	27.5	38.7	5.551	1.11
STAGE 6	1.551	7.4	11.1	1.489	.58
STAGE 7	.345	1.6	3.8	.331	.31
FILTER	.444	2.1	2.1	.426	
TOTAL	21.002			20.166	


HARSHAW CHEMICAL
HCA-PS-3
delta e / delta log D (mg/Nm3)
30
25
20
15
10
5
0
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : B.P. REFINERY

RUN NO.: BP-PS-1

LOCATION : FCC-STACK

DATE OF RUN : 8/12/82

OPERATOR : MARK BINDBEOTEL

PLATE TYPE : ???

========== FIELD DATA ==========

PITOT C FACTOR : .84

DELTA P : .43 IN.H20

METER BOX I.D.: ES-5

DELTA H@ : ~~1.174~~ IN. H20

METER Y FACTOR : .98

DELTA H : .26 IN.H20

METER VOLUME : 4.632 CU.FT.

AVG. METER TEMP.: 99 F

NOZZLE DIAMETER : .103 IN.

TIME START : 13:53

LENGTH OF RUN : 15 MINS.

AMBIENT TEMP.: 86 F

BAROMETER : 29.93 IN.HG.

STACK DIAMETER : ~~1 FT.~~

STACK GAS MW.: 28.4

STACK GAS MOISTURE : 9 %

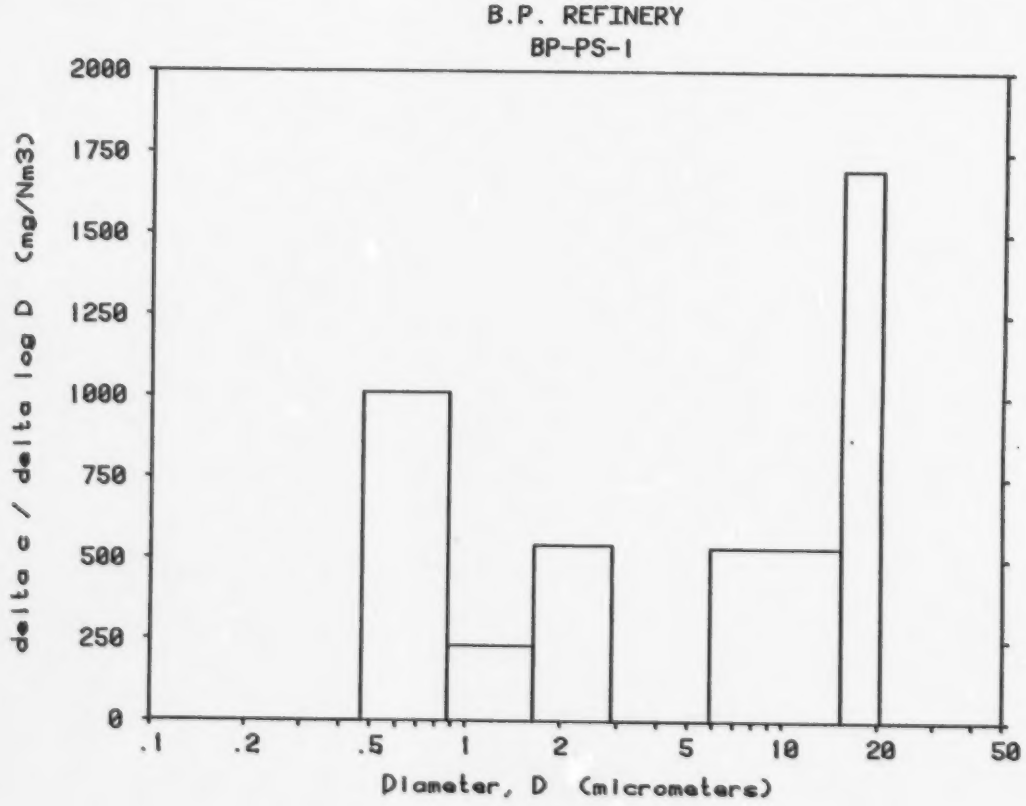
STACK TEMP.: 487 F

STATIC PRESSURE : -.38 IN.H20

========== CALCULATED DATA ==========

49.7	VELOCITY (FPS)	~~71294~~	DNCF/HR
.564	ACFM	~~2019~~	DNCM/HR
4.292	DNCF	~~3.7~~	LB/HR (STD)
.1215	DNCM	~~1.827~~	KG/HR (STD)
103.5	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	0	0	100	0	20.5
STAGE 2	25.624	23.3	100	210.845	15.4
STAGE 3	27.009	24.6	76.7	222.241	5.9
STAGE 4	0	0	52.1	0	2.9
STAGE 5	16.301	14.8	52.1	134.131	1.64
STAGE 6	7.594	6.9	37.3	62.487	.88
STAGE 7	33.464	30.4	30.4	275.356	.47
FILTER	0	0	0	0	
TOTAL	109.992			905.059	


B.P. REFINERY
BP-PS-1
delta e / delta log D (mg/Nm3)
2000
1750
1500
1250
1000
750
500
250
0
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : B.P. REFINERY

RUN NO.: BP-PS-2

LOCATION : FCC-STACK

DATE OF RUN : 8/12/82

OPERATOR : MARK BINDBEUTEL

PLATE TYPE : ???

FIELD DATA

PITOT C FACTOR : .84

DELTA P : .43 IN.H2O

METER BOX I.D.: ES-5

DELTA H@ : ~~1.24~~ IN. H2O

METER Y FACTOR : .98

DELTA H : .26 IN.H2O

METER VOLUME : 4.56 CU.FT.

AVG. METER TEMP.: 100.6 F

NOZZLE DIAMETER : .183 IN.

TIME START : 21:25

LENGTH OF RUN : 15 MINS.

AMBIENT TEMP.: 79 F

BAROMETER : 29.93 IN.HG.

STACK DIAMETER : ~~1 FT.~~

STACK GAS MW.: 28.4

STACK GAS MOISTURE : 9 %

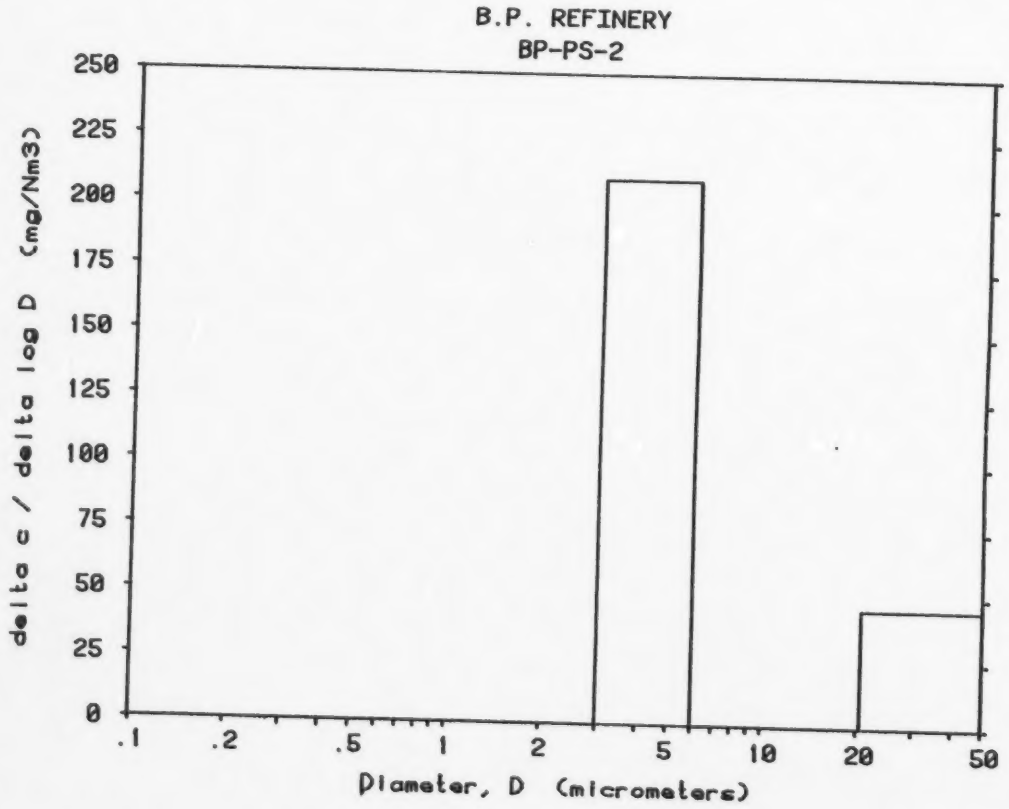
STACK TEMP.: 486.6 F

STATIC PRESSURE : -.38 IN.H2O

CALCULATED DATA

49.7	VELOCITY (FPS)	~~71309~~	DNCF/HR
.554	ACFM	~~2017~~	DNCM/HR
4.213	DNCF	~~15~~	LB/HR (STD)
.1193	DNCM	~~182~~	KG/HR (STD)
101.6	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	2.078	21.7	100	17.418	20.6
STAGE 2	0	0	78.3	0	15.6
STAGE 3	0	0	78.3	0	6
STAGE 4	7.52	78.3	78.3	63.035	3
STAGE 5	0	0	0	0	1.66
STAGE 6	0	0	0	0	.89
STAGE 7	0	0	0	0	.48
FILTER	0	0	0	0	
TOTAL	9.598			80.453	


B.P. REFINERY
BP-PS-2
delta c / delta log D (mg/Nm3)
250
225
200
175
150
125
100
75
50
25
0
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : ALLIED CHEMICAL
DATE OF RUN : 9/30/82
RUN NO.: AC-PS-1
OPERATOR : MARK BINDBEOTEL
LOCATION : ACID PLANT
PLATE TYPE : ???

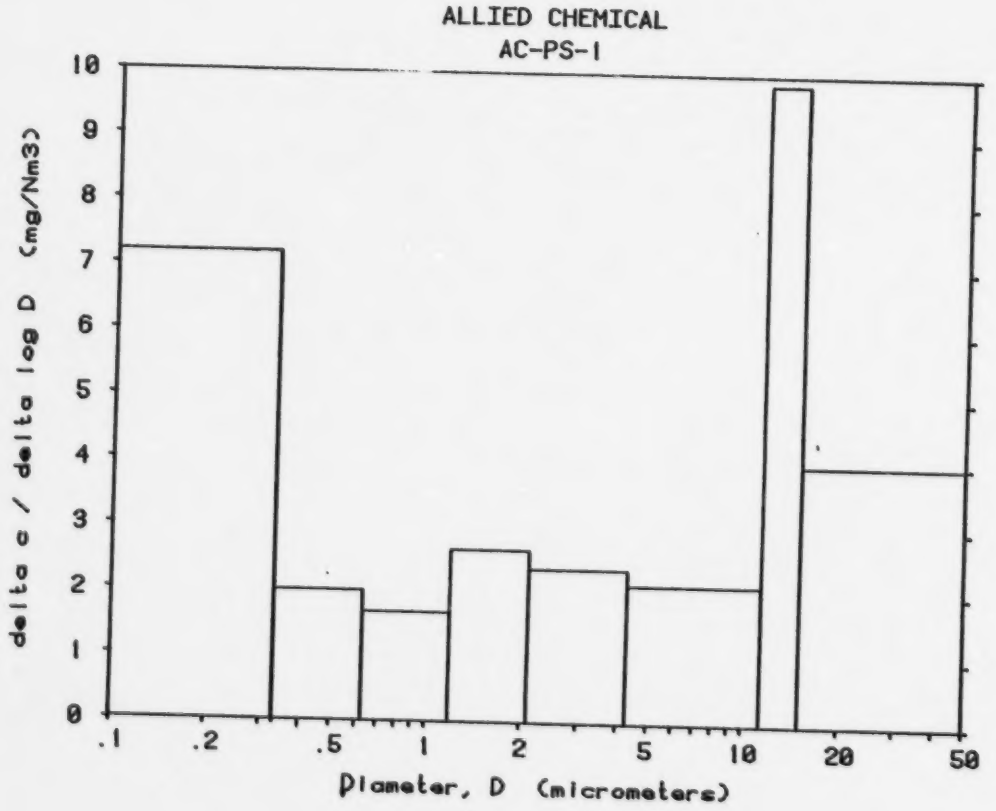
========== FIELD DATA ==========

PITOT C FACTOR : .84
TIME START : 18:00
DELTA P : 1.25 IN.H20
LENGTH OF RUN : 60 MINS.
METER BOX I.D.: ES-5
AMBIENT TEMP.: 68 F
DELTA H@ : ~~1.74~~ IN. H20
BAROMETER : 30.34 IN.HG.
METER Y FACTOR : .98
STACK DIAMETER : ~~1 FT.~~
DELTA H : 1.41 IN.H20
STACK GAS MW.: 28.4
METER VOLUME : 41.586 CU.FT.
STACK GAS MOISTURE : 0 %
AVG. METER TEMP.: 101.75 F
STACK TEMP.: 192.5 F
NOZZLE DIAMETER : .186 IN.
STATIC PRESSURE : 3.128 IN.H20

========== CALCULATED DATA ==========

69.6	VELOCITY (FPS)	~~162709~~	DNCF/HR
.736	ACFM	~~1607~~	DNCM/HR
38.976	DNCF	~~.1~~	LB/HR (STD)
1.1037	DNCM	~~.048~~	KG/HR (STD)
99.7	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	2.29	20.1	100	2.075	15.1
STAGE 2	1.328	11.7	79.9	1.203	11.4
STAGE 3	.995	8.7	68.2	.902	4.3
STAGE 4	.812	7.1	59.5	.736	2.1
STAGE 5	.72	6.3	52.4	.652	1.19
STAGE 6	.51	4.5	46	.462	.83
STAGE 7	.619	5.4	41.6	.561	.33
FILTER	4.116	36.1	36.1	3.729	
TOTAL	11.39			10.32	


ALLIED CHEMICAL
AC-PS-1
delta c / delta log D (mg/Nm3)
10
9
8
7
6
5
4
3
2
1
0
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : ALLIED CHEMICAL

RUN NO.: AC-PS-2

LOCATION : ACID PLANT

DATE OF RUN : 10/1/82

OPERATOR : MARK DINDBEOTEL

PLATE TYPE : ???

========== FIELD DATA ==========

PITOT C FACTOR : .84

DELTA P : 1.25 IN.H2O

METER BOX I.D.: ES-5

DELTA H@ : ~~1.774~~ IN. H2O

METER Y FACTOR : .98

DELTA H : 1.38 IN.H2O

METER VOLUME : 41.247 CU.FT.

AVG. METER TEMP.: 100.5 F

NOZZLE DIAMETER : .186 IN.

TIME START : 11:40

LENGTH OF RUN : 60 MINS.

AMBIENT TEMP.: 71 F

BAROMETER : 30.3 IN.HG.

STACK DIAMETER : 1 FT.

STACK GAS MW.: 28.4

STACK GAS MOISTURE : 0 %

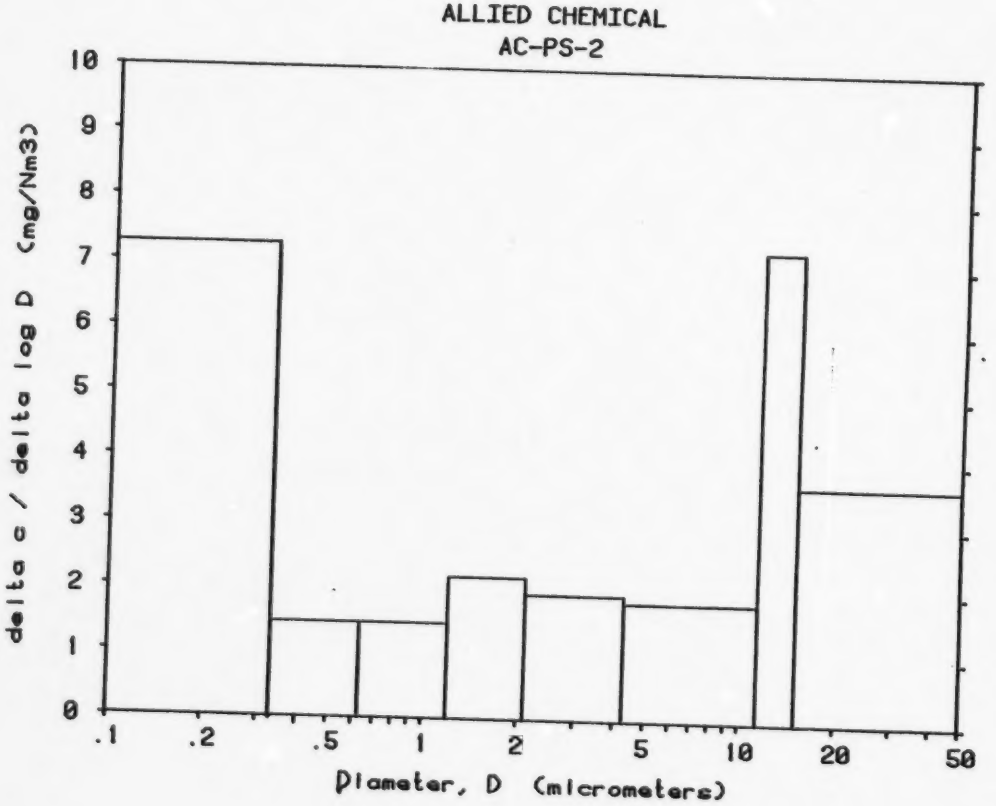
STACK TEMP.: 197 F

STATIC PRESSURE : 3.128 IN.H2O

========== CALCULATED DATA ==========

69.9	VELOCITY (FPS)	162045	DNCF/HR
.786	ACFM	4589	DNCM/HR
38.691	DNCF	.1	LB/HR (STD)
1.0956	DNCM	.042	KG/HR (STD)
99.4	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	2.075	20.4	100	1.894	15.1
STAGE 2	.969	9.5	79.6	.884	11.4
STAGE 3	.84	8.3	70	.767	4.3
STAGE 4	.656	6.5	61.7	.599	2.1
STAGE 5	.58	5.7	55.3	.529	1.2
STAGE 6	.447	4.4	49.5	.408	.63
STAGE 7	.448	4.4	45.1	.409	.33
FILTER	4.132	40.7	40.7	3.771	
TOTAL	10.147			9.262	


ALLIED CHEMICAL
AC-PS-2
delta c / delta log D (mg/Nm3)
10
9
8
7
6
5
4
3
2
1
0
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

PILAT IMPACTOR DATA REDUCTION

PLANT : ALLIED CHEMICAL
DATE OF RUN : 10/1/82
RUN NO.: AC-PS-3
OPERATOR : MARK BINDBEUTEL
LOCATION : ACID PLANT
PLATE TYPE : ???

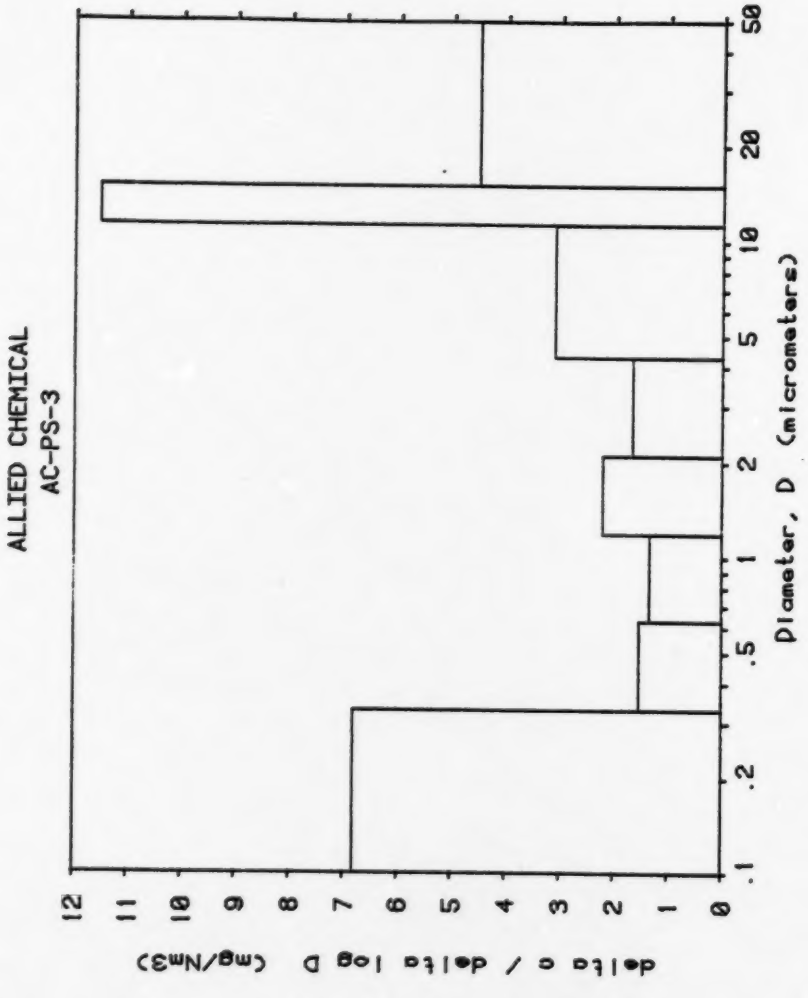
FIELD DATA

PITOT C FACTOR : .84
TIME START : 13:15
DELTA P : 1.25 IN.H20
LENGTH OF RUN : 60 MINS.
METER BOX I.D.: ES-5
AMBIENT TEMP.: 74 F
DELTA H@ : ~~1.74~~ IN. H20
BAROMETER : 30.3 IN.HG.
METER Y FACTOR : .98
STACK DIAMETER : ~~1 FT~~.
DELTA H : 1.30 IN.H20
STACK GAS MW.: 28.4
METER VOLUME : 41.35 CU.FT.
STACK GAS MOISTURE : 0 %
AVG. METER TEMP.: 100.67 F
STACK TEMP.: 210.6 F
NOZZLE DIAMETER : .186 IN.
STATIC PRESSURE : .120 IN.H20

CALCULATED DATA

71	VELOCITY (FPS)	~~16941.5~~	DNCF/HR
.814	ACFM	~~.515~~	DNCM/HR
38.776	DNCF	~~1~~	LB/HR (STD)
1.098	DNCM	~~.047~~	KG/HR (STD)
101.2	% ISOKINETIC		

	MASS(MG.)	TOT. %	CUM. %	MG/DNCM	D/50
STAGE 1	2.594	22.5	100	2.362	15
STAGE 2	1.558	13.5	77.5	1.419	11.3
STAGE 3	1.431	12.4	63.9	1.303	4.3
STAGE 4	.567	4.9	51.5	.516	2.1
STAGE 5	.598	5.2	46.6	.545	1.19
STAGE 6	.407	3.5	41.4	.371	.63
STAGE 7	.47	4.1	37.8	.428	.33
FILTER	3.882	33.7	33.7	3.535	
TOTAL	11.507			10.48	


ALLIED CHEMICAL
AC-PS-3
delta σ / delta log D (mg/Nm3)
0
1
2
3
4
5
6
7
8
9
10
11
12
.1
.2
.5
1
2
5
10
20
50
Diameter, D (micrometers)

APPENDIX C

HIGHWAY VEHICLE EMISSIONS INVENTORY DOCUMENTATION

DELAWARE VALLEY
REGIONAL PLANNING COMMISSION
The Bourse Building, 21 South 5th St., Philadelphia, PA 19106 (215) 592-1800

DATE: 08/07/84

FROM: R.J. FIJALKOWSKI

TO: File: "1982 Particulate/SO2 Inventory"

SUBJECTS: "Simulation Process & Daily Adjustment Factors"
Memorandum # 3

I. INTRODUCTION

This memorandum builds upon the study processes previously presented in memorandums no. 1 and 2 (October 14, 1982 and April 18, 1983), which discussed:

NO. 1 - * Weekday vs. Weekend Travel Survey
(Thursday vs. Saturday)
* Hourly Weekend Travel Variation

NO. 2 - * Hourly Weekday Travel Varation
* Single Unit Heavy Truck Survey
* Silt Loading Roadway Classifications

Specifically this memorandum discusses the bases for the travel estimation process to be used for deriving 1982 Average Annual Weekday Travel, and adjustements for deriving daily estimates reflecting August, 1982 VMT as required for the inventory.

II. TRAVEL SIMULATION

As part of its ongoning transportaion planning program the DVRPC maintains a calibrated(1977) transportation simulation process for determining both current and future (year 2000) travel in the region. This process consists of four primary phases, with full documentation of each phase available under separate cover:

Commonwealth of Pennsylvania • Bucks County • Chester County • Delaware County • Montgomery County • City of Philadelphia • City of Chester
State of New Jersey • Burlington County • Camden County • Gloucester County • Mercer County • City of Camden • City of Trenton

1) Trip Generation - Estimation of daily trips productions and attractions for each census tract in the region for 13 different travel categories (e.g. work, nonwork etc.). Model is dependent upon following social and economic variables:

* Occupied Dwelling Units
* Autos Per Household
* Employment By Standard Industrial Classification Code

2) Trip Distribution - The process whereby census tract trip ends are linked together to form origin and destination patterns in trip table format. The basic premise in the allocation process is that trips between a pair of tracts will be proportional to the number of trips generated in the production tract and the number of trips attracted in the destination tract, and inversely proportional to the physical separation between the tracts measured in terms of travel time.

The DVRPC distribution process applies a different model for each category of trip, with the inverse proportionality factor calibrated by trip type.

3) Modal Split - The mode choice models further allocate travel between tracts to either the highway or transit systems. Trips between each pair of tracts are divided into automobiles or transit based upon the difference between travel times for each mode, and a empirically defined relationship depicting the percent of travel by transit for this difference. Since the empirical relationship is sensitive to both trip type and auto availability, separate models are applied for each travel purpose and for autoless and car-owning households.

4) Highway Assignment - The process of defining highway paths between census tract pairs and accumulating total vehicle travel on each coded highway segment. Paths for the DVRPC assignment process are developed based upon minimum travel times between each tract combination. Since a single application of the assignment model will result in unreasonable overloading of principal highways, the model is applied in an iterative fashion in which travel times are adjusted based upon the volume and capacity of each road segment.

The simulation process will act as the bases for deriving vehicle miles of travel estimates for the Particulate/So2 Inventory. Estimates will be separately derived for the coded regional simulation network and for the non-coded local highway system. The process to be applied for deriving each segment is discussed below.

A. Network Travel

In lieu of the short time frame between the calibrated DVRPC simulation and the Particulate/SO2 Inventory's 1982 target, the simulation process will be modified in order to maximize data already available from the ongoing planning program. A 1982 highway trip table developed through interpolation between the 1977 base and the year 2000 forecast will be used for defining 1982 average weekday trip demand. This process eliminates the development of extensive demographic and employment data required to apply the complete modelling chain.

The interpolated trip table will then be assigned to derive the base 1982 average weekday travel estimates.

B. Non-Network Travel

In order for the inventory to be complete, travel on local facilities not explicitly included in the network must be added. Travel to and from the network on such facilities is assigned to pseudo links connecting the network to the tract centroids during the simulation process. Trips with both their origin and destination within the same tract are excluded from the pseudo links however since the assignment process assumes such travel does not access the coded network.

These intrazonal movements will be estimated by separately allocating such trips from the 1982 trip table to the pseudo centroid connectors assuming an average trip length of one-half the zonal radius.

Total local vehicle miles is then derived as the sum of intra and inter zonal movements assigned to the centroid system.

III. DAILY ADJUSTEMENTS

As cited above, the simulation process by design replicates highway travel which occurs on an average weekday. Study memorandum no. 1 described the weekday versus weekend traffic count survey conducted by DVRPC, in order to convert the average weekday (Thursday) simulation results to representative Saturday traffic volumes surrounding the Particulate/So2 monitoring sites. Memorandum no. 2 simlarly described the typical variations throughout the week, based upon the ongoing coverage count program administered by the Pennsylvania Department of Transportation. The table below illustrates the typical coverage count variations on week and weekend days by area using Thursday and Saturday as base references:

Coverage Count Program Daily Variations By Area

	WEEKDAY (% Thur)				WEEKEND (% Sat)		
	Urban	Suburban	Rural		Urban	Suburban	Rural
Mon	092	097	092	Sat	100	100	100
Tue	095	096	092	Sun	087	092	099
Wed	097	097	095				
Thu	100	100	100				
Fri	104	111	113				

Since the two simulated results for the inventory will represent average weekday (Thursday) and Saturday travel, the coverage factors shown above were weighted based upon the percent of travel occuring regionally within each area (shown below) to develop adjustment factors for deriving separate inventories for each day of the week. The final adjustment factors derived for each day of the week are also shown below.

Percent Regional VMT By Area

Source: The Simulation of 1977 Travel on the Current (1977) on the Current (1977) Transportation Systems

Area	%
Urban	23
Surburban	47
Rural	30
Region	100

Regional Weekday and Weekend VMT Adjustements

Weekday (% Thur)		Weekend (% Sat)	
Mon	094	Sat	100
Tue	095	Sun	093
Wed	096		
Thu	100		
Fri	110		

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
The Bourse Building, 21 South 5th St., Philadelphia, PA 19106 (215) 592-1800

MEMORANDUM

DATE October 14, 1982

FROM Abdul Latif

TO File
"1982 Particulates/SO_2 Inventory"

SUBJECT Weekday vs. Weekend Travel Factors

I. INTRODUCTION

This memorandum summarizes the results of a weekday versus weekend traffic count survey conducted during August, 1982. This work was undertaken to fulfill a contractual agreement between the DVRPC and the Engineering Science (ES) to provide them with 1982 travel and emission inventories of total suspended particulates (TSP), primary sulfate (SO_4) and sulfur dioxide (SO_2). DVRPC's agreement is to provide for 289 grid cells of 25 km on the side as defined by ES.

The work reported in this memo consists of the following:

A. Develop and Select Facilities for Defining Weekend vs Weekday Travel
B. Collect and Summarize Traffic Counts
C. Develop Weekend vs Weekday Adjustment Process

This memo presents work completed up to September 30, 1982.

II. DEVELOP AND SELECT FACILITIES

A. Location of Monitors

Engineering Science has supplied DVRPC with a list of the following 6 monitors which will be used in the calibration of the TSP (and other) modelling results.

Monitor #5: Community Health Services Building
500 South Broad Street
Philadelphia, Pa.
(operated by Air Management Services)

Monitor #7: Delaware River Fireboat Station
Allegheny and Delaware Ave.
Philadelphia, Pa.
(operated by Air Management Services)

Monitor #8: Bellmont Ave. Water Treatment Plant
Ford Road
Philadelphia, Pa.
(operated by Air Management Services)

Monitor #12: North East Airport
Grant and Ashton Roads
Philadelphia, Pa.
(operated by Air Management Services)

Monitor #28 Camden Institute of Medical Records
Copewood & Davis St.
Camden, N. J.
(operated by New Jersey DEP)

Monitor #34: Clarksboro Shady Lane Home
Off Route 551
Clarksboro, N. J.
(operated by New Jersey DEP)

The location of these monitors is shown on Figure 1. All of these monitors are located within a square area, 42.5 km on side, as shown in Figure 2. This area consists of 289 grid cells 2.5 km on each side, fully contained within the 81 cell 5 km grid system previously developed for Philadelphia Oxidant Modelling.[1]

B. Selection of Links for Traffic Counts

In order to monitor representative traffic within the study area (42.5 km square), three highway links were selected around each of the 6 monitor sites. In selecting these links, the following generalized criteria were observed:

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1. Delaware Valley Regional Planning Commission, Philadelphia Air Quality Control Region Mobile Source Emissions Inventory, Final Report, Philadelphia: February, 1980.

Figure 1
Location of monitors for TSP Modelling.

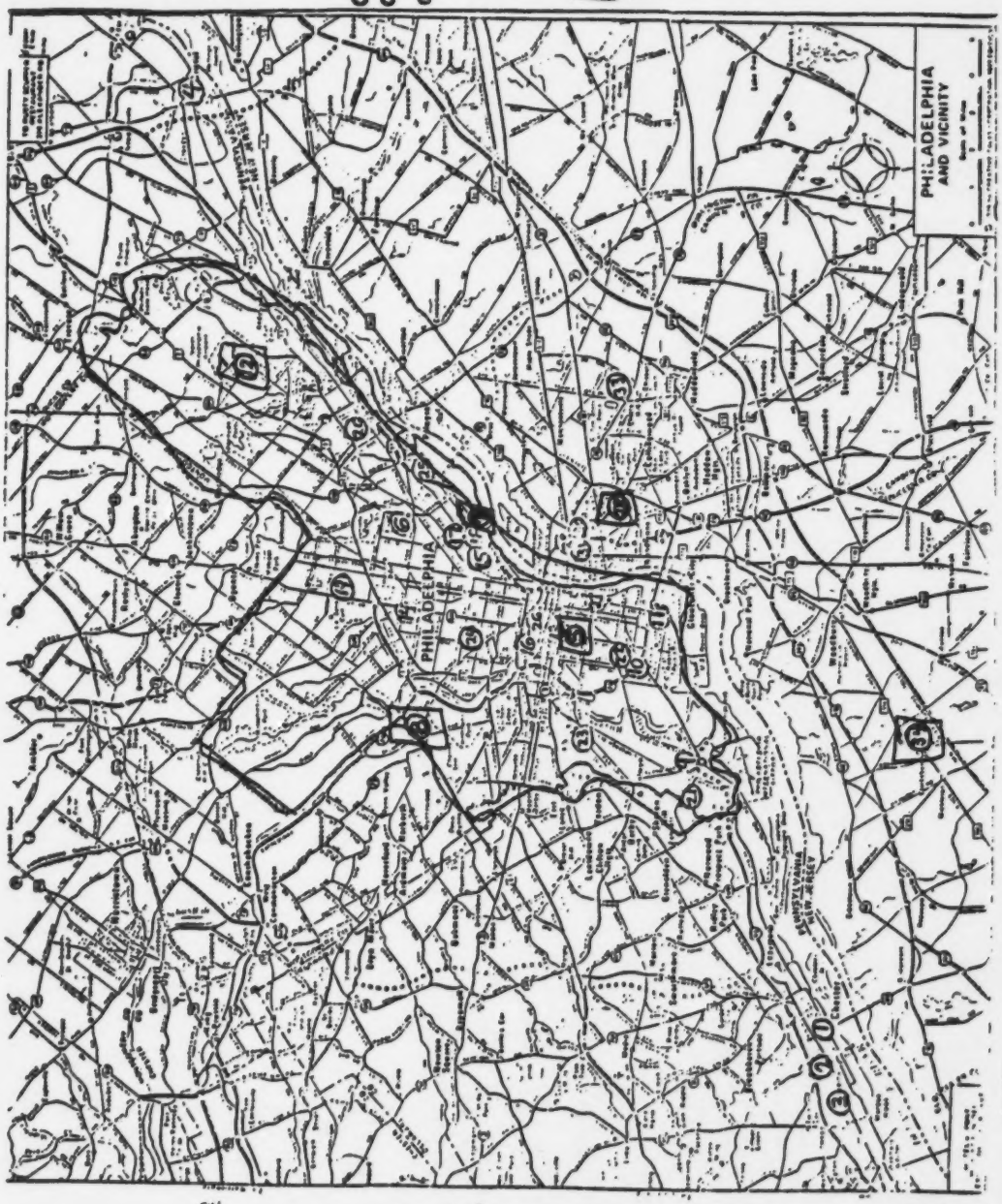
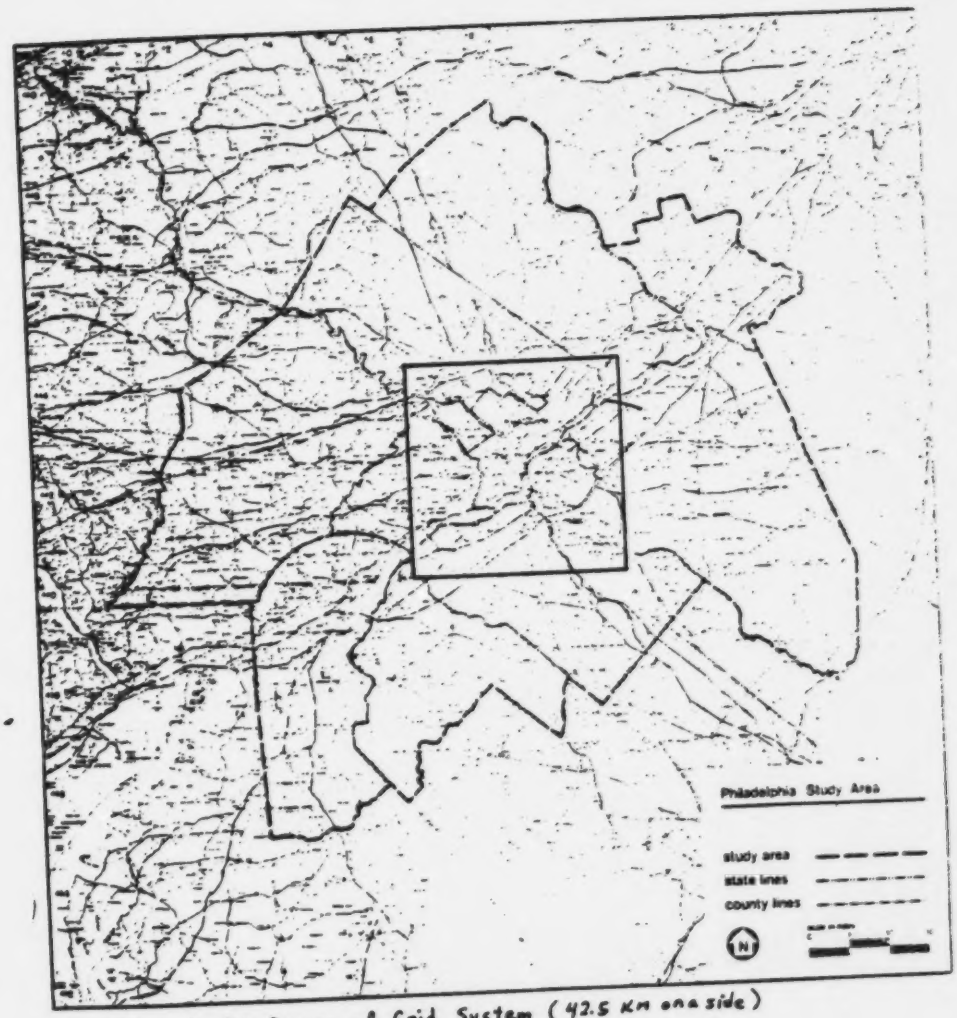


Figure 2:
STUDY AREA FOR TSP MODELLING.



Location of SW Corner of Grid System (42.5 Km on a side)

Easting 464.5 KM
Northing 4400.0 Km

289 grid cells (17x17) 2.5 Km on a side
Overlays Philadelphia Oxidant Study grid system

1) The links should be generally within a 2.5 km square grid in which the monitor falls. However, in no case should a link fall outside a 5 km square grid, if it was deemed necessary to go outside the smaller grid to accommodate other criteria.

2) The selected links should reflect various route types (highway functional classification) and area types encountered within the region.

3) Where possible, links which have distinct weekday/weekend traffic flow patterns should be selected in order to study changes in traffic during the week (e.g. links serving recreational traffic).

The details of the links counted are given in Appendix A. The distribution of these links by route type and area type is shown in the following Table 1.

Table 1.

Distribution of Links Counted (By Route Type/Area Type)

Route Type \ Area Type	1. CBD 2. Fringe	3. Urban	4. Sub. Urban	5. Rural 6. Open Rural	All Area Types
1. Interstate 2. Freeways 8. Ramps	1	1	1	1	4
3. Principal Art 4. Minor Art	2	3	4	1	10
5. Collectors 6. Locals	-	3	-	1	4
All Route Types	3	7	5	3	18

The traffic on the identified links was counted during the month of August 1982. The targetted counts were those for a Thursday and a Saturday to represent typical weekday and weekend traffic respectively. Hourly counts were recorded by automatic counters.

The objective for these counts were:

1) To study if any significant differences are exhibited by weekday and weekend traffic patterns by route type, area type or by monitor location.

2) To develop factors for disaggregating average weekday traffic (AWDT) (which is the output of the DVRPC travel simulation process) with 24 hourly aggregations to prepare travel and emission inventories needed by Engineering Science.

3) To develop factors to convert average weekday traffic into weekend traffic.

4) To develop 24 hourly factors to convert the above weekend traffic into hourly volumes as requested by the Engineering Science.

C. Treatment of Traffic Patterns Not Studied by Traffic Counts

The time and cost involved in the actual traffic counting program did not permit the study of all possible types of traffic variations. For example, while it is considered desireable to study and develop factors for the route types/area types serving recreational traffic in Pennsylvania and New Jersey, no links falling in this category were identified as a part of the 18 links selected for actual counts. It was therefore decided that where possible, data compiled by previous DVRPC studies, or by the Pennsylvania and New Jersey DOT's would be analyzed for comparable time frames during previous years.

A study of the New Jersey and Pennsylvania Dept. of Transportation's traffic pattern type yields the following information:

a) No road/highway link on the Pennsylvania side of the region within the study area is classified as Group IV, V or VI, which represent recreational uses. No additional analyses were therefore considered necessary for Pennsylvania.

b) In New Jersey, the traffic arteries include a few facilities which lead to recreational areas outside the study area. For example, the North-South Freeway (Route 42) serves the traffic to Atlantic City via the Atlantic City Expressway.

Unfortunately since NJ DOT does not utilize weekend counts in the classification Program, no information is readily available for grouping and adjusting such counts for the inventory.

III. COLLECT AND SUMMARIZE TRAFFIC COUNTS

A. Traffic Counts

The traffic on the 18 links selected for this purpose was counted by automatic traffic counters. All of the counts were collected between Monday, August 11, 1982 and Monday, August 30, 1982. Thursday's counts were used to reflect the weekday conditions while Saturday traffic was used for weekends. Traffic was continuously monitored; the counts were then aggregated by clock hours.

B. Analysis of the Traffic Counts

Counts for the weekday (Thursday) and the weekend (Saturday) counts by hour, were then compiled. Where a particular highway link traffic was directional, and/or in different inner and outer lanes, all the daily counts by hour were aggregated together. Factors showing the hourly traffic as a percentage of total daily traffic were also computed. These compilations are available in Appendix B grouped by the route type and area type, illustrating weekend total traffic as a percent of weekday by each monitor and link counted, in addition to average weekend/weekday factors.

Table 2. Summarizes the weekend/weekday traffic, by route type, area type and by monitor location. The following observations can be made on these figures:

- For all the links observed, the weekend traffic is lower than the weekday traffic. The highest weekend/weekday ratio of 93.31% was seen for the Bustleton Av. in NE Philadelphia, signifying rather low weekend-weekday variation. The lowest weekend/weekday factor of 65.19% was encountered on I-676 in Camden, a major commuter approach to the Philadelphia CBD.

- On average, higher weekend/weekday variations (lower weekend factors) are obtained on route types 1. There is little difference in the weekend factors for routes type 3-4 and 5-6.

- The standard deviation of the groups of observations for various route type/area type classification is small. * The maximum standard deviation in route type/area type shown in Table 2 is 9.4%. The overall standard deviation of various route type classifications over all area types is slightly lower (5.5% for route type 1; 9.2% for routes 3 & 4 and 48% for route type 5) than the composite deviations across route types (7.2% for area type 1, 2; 10.1% for area type 3; 8.9% for area type 4 and 12.9% for area types 5, 6).

---

* Standard deviation of the sample means it was calculated by the following relationship

$$S_x = \sqrt{\sum (x - \bar{x})^2 / n - 1}$$

Where X is the individual weekend factor, $\bar{X}$ is the average weekend factor, and N is the number of observations.

TABLE 2

Weekend Traffic As A Percentage of Weekday Traffic

By Monitor, Route and Area Types
(With Standard Deviation of Sample Means)

Route Type \ Area Type	1, 2	3	4	5, 6	Average (All Area Types)
1,2,8	#8) 74.8 % S_X =0.0 %	#28) 65.2 % S_X= 0.0 %	#5) 76.8 % S_X= 0.0 %	#34) 69.7 % S_X = 0.0 %	73.2 % S_X = 5.5 %
3,4	#5) 76.2 % #5) 87.5 % $\bar{x}$ = 83.5 % S_X =8.3 %	#7) 67.9 % #7) 84.6 % #8) 68.4 % $\bar{x}$ = 72.1 % S_X= 8.3 %	# 8) 86.7 % #12) 93.3 % #12) 86.1 % #28) 71.3 % $\bar{x}$ = 82.4 % S_X= 9.4 %	#34) 89.1 % S_X = 0.0 %	81.7 % S_X = 9.2 %
5,6		# 7) 88.0 % #12) 84.6 % #28) 79.8 % $\bar{x}$ = 84.4 % S_X = 4.1 %		#34) 78.1 % S_X = 0.0 %	81.1 % S_X = 4.8 %
Average (All Route Types)	78.0 % S_X =7.2 %	74.0 % S_X = 10.1 %	81.1 % S_X = 8.9 %	72.0 % S_X= 12.9 %	77.8 % S_X = 0.0 %

Note: The monitor identification is shown as #8)

S_X = Standard deviation of sample

IV. DEVELOPMENT OF WEEKDAY TO WEEKEND ADJUSTMENT PROCESS

A. Weekday to Weekend Adjustment

Based on the observations the following factors will be used to convert weekday traffic to weekend traffic for developing the particulates/SO_2 inventory:

1. Route Types 1,2 & 8 — 0.732 (S_x = 5.5 %)
2. Route Types 3 & 4 — 0.817 (S_x = 9.2 %)
3. Route Types 5 & 6 — 0.811 (S_x = 4.8 %)

These factors will be applied uniformly to the entire study area since:

1. No bias amongst areas was evidenced from the survey, and
2. Number of samples was too limited to provide valid stratification by both route and area.

B. Hourly Traffic Factors for Weekend Traffic

Appendix C summarizes the hourly traffic factors for weekend traffic. Factors have been shown in this appendix by individual links counted, and on average from all area types for the 3 route type aggregations recommended above. In the case of route types 1, 2 & 8 and 5 & 6, the average hourly factor (last column on all tables in Appendix C) does not differ from component links by more than 1 percent point. However in case of route type aggregations 3 & 4, the overall hourly factors differ, in some instance, more than 1 percentage point from the composite of the 10 component links. If the Broad Street link is dropped from this compilation, the resulting overall hourly factors then are within ± 1 percent of the 9 links constituting this aggregation. The Broad Street counts exhibit more or less uniform traffic distribution throughout most of the 24-hour period, and therefore is atypical of the traffic behavior.

It is therefore suggested that the factors shown in Table 3 (which excludes Broad Street) be used for converting weekday traffic to hourly volume.

C. Application of Weekend and Hourly Volume Factors

The traffic simulation process of the DVRPC outputs average annual weekday traffic (AAWT). This AAWT will be used to produce average weekend traffic as follows:

Weekend Traffic = Weekend traffic factors (from Table 2) * AAWT

The hourly volume factors given in Table 3 will then be used to generate hourly weekend traffic by the following process:

Hourly Weekend Volume = Hourly factors (from Table 3)
* Weekend Traffic

TABLE 3

Hourly Volume Factors to be Applied to

Weekend Traffic

Hour	Route Type 1,2,8	Route Type 3 & 4	Route Type 5 & 6
1	2.735	2.86	2.771
2	1.797	1.90	1.706
3	1.503	1.54	1.344
4	1.080	0.92	0.908
5	0.920	0.60	0.642
6	1.248	0.72	0.792
7	2.574	1.65	1.815
8	3.504	2.59	2.853
9	4.358	3.61	3.481
10	5.229	4.63	4.177
11	5.672	5.48	5.651
12	6.238	6.43	6.436
13	6.309	6.88	7.323
14	6.061	6.77	7.070
15	5.789	6.57	6.442
16	5.676	6.57	6.279
17	5.721	6.25	5.985
18	5.802	5.97	5.753
19	5.781	5.59	5.869
20	5.337	5.55	5.685
21	4.138	4.99	5.091
22	4.019	4.37	4.163
23	4.433	3.93	4.020
24	4.077	3.64	3.747
Total	100.00	100.00	100.000

APPENDIX A

Survey Locations

- By Route/Area
- By Monitor

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
PARTICULATES/SO2 INVENTORY
COUNT SURVEY LOCATIONS BY ROUTE/AREA TYPE

<-LOCATION-->	<--FROM--->	<---TO---->	RT	AR	MAP	LINK	MN	GRID
I-95	RACE ST.	CHESTNUT ST	1	1	0932	224	5	242
I-676	ATLANTIC	FERRY AVE	1	3	0943	135	28	269
I-76	BELMONT AVE	CITY LINE	1	4	0765	4	8	285
I-295	MANTUA GR.	THOROFARE	1	5	1110	40	34	320
S. BROAD ST	CHESTNUT	WALNUT ST	3	1	0933	40	5	241
CASTOR AVE	RICHMOND ST	THOMPSON ST	3	3	0941	36	7	218
FRANKFORD AVE	LEHIGH AVE	ALLEGHENY	3	3	0941	10	7	218
CITY LINE AVE	WEST OF BELMONT AVE		3	4	0765	132	8	285
US 1	GRANT AVE	RED LION	3	4	0772	104	12	170
BUSTLETON AVE	SOUTH OF WELSH RD		3	4	0772	26	12	170
NJ 70	CUTHBERTH	SORREL HILL	3	4	0944	43	28	269
SPRUCE ST	WEST OF 34TH ST		4	1	1606	46	5	241
BELMONT AVE	NORTH OF CITY LINE		4	3	0765	7	8	285
CO. 551	COHAWKEN	CEDAR RD.	4	5	1110	53	34	320
SUSQUEHANNA	NORRIS ST	FRANKFORD	5	3	0941	122	7	218
ASHTON RD	WELSH RD	GRANT AVE	5	3	0772	107	12	170
BROWNING RD	S. PARK DR	HADDON AVE	5	3	0944	40	28	269
COHAWKEN RD	BAKLEY RD	RT 551	5	5	1110	52	34	320

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
PARTICULATES/SO2 INVENTORY
COUNT SURVEY LOCATIONS BY MONITOR

<-LOCATION-->	<--FROM-->	<---TO---->	R T	A R	MAP	LINK	M N	GRID
I-95	RACE ST.	CHESTNUT ST	1	1	0932	224	5	242
S. BROAD ST	CHESTNUT	WALNUT ST	3	1	0933	40	5	241
SPRUCE ST	WEST OF 34TH ST		4	1	1606	46	5	241
CASTOR AVE	RICHMOND ST	THOMPSON ST	3	3	0941	38	7	218
FRANKFORD AVE	LEHIGH AVE	ALLEGHENY	3	3	0941	10	7	218
SUSQUEHANNA	NORRIS ST	FRANKFORD	5	3	0941	122	7	218
I-76	BELMONT AVE	CITY LINE	1	4	0765	4	8	285
CITY LINE AVE	WEST OF BELMONT AVE		3	4	0765	132	8	285
BELMONT AVE	NORTH OF CITY LINE		4	3	0765	7	8	285
US 1	GRANT AVE	RED LION	3	4	0772	104	12	170
BUSTLETON AVE	SOUTH OF WELSH RD		3	4	0772	26	12	170
ASHTON RD	WELSH RD	GRANT AVE	5	3	0772	107	12	170
I-676	ATLANTIC	FERRY AVE	1	3	0943	135	28	269
NJ 70	CUTHBERTH	SURREL HILL	3	4	0944	43	28	269
BROWNING RD	S. PARK DR	HADDON AVE	5	3	0944	40	28	269
I-295	MANTUA GR.	THOROFARE	1	5	1110	40	34	320
CO. 551	COHAWKEN	CEDAR RD.	4	5	1110	53	34	320
COHAWKEN RD	BAKLEY RD	RT 551	5	5	1110	52	34	320

APPENDIX B

WEEKDAY AND WEEKEND TRAFFIC

GROUPED BY ROUTE TYPE/AREA TYPES

- Total Hourly 2-Way Volume
- % of Total Daily Travel By Hour

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 1
LINKS COUNTED = 1
WEEKDAY TRAFFIC

MONITOR #5
LINK ID# INTER-ST 95 ALL LINKS

HOUR	BOTH #	%	Total	%
1	1129	1.618	1129	1.618
2	630	0.903	630	0.903
3	601	0.861	601	0.861
4	483	0.692	483	0.692
5	632	0.906	632	0.906
6	1343	1.925	1343	1.925
7	4120	5.904	4120	5.904
8	4929	7.064	4929	7.064
9	4098	5.873	4098	5.873
10	3278	4.698	3278	4.698
11	3285	4.708	3285	4.708
12	3220	4.614	3220	4.614
13	3127	4.481	3127	4.481
14	3318	4.755	3318	4.755
15	3842	5.506	3842	5.506
16	4895	7.015	4895	7.015
17	6092	8.730	6092	8.730
18	5045	7.230	5045	7.230
19	3654	5.236	3654	5.236
20	3331	4.774	3331	4.774
21	2254	3.230	2254	3.230
22	2000	2.866	2000	2.866
23	2074	2.972	2074	2.972
24	2401	3.441	2401	3.441
TOTAL	69781	100.000	69781	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 1
LINKS COUNTED = 1
WEEKEND TRAFFIC

MONITOR # 5
LINK ID# INTER-ST 95 ALL LINKS

HOUR	BOTH #	%	Total	%
1	1498	2.870	1498	2.870
2	1025	1.964	1025	1.964
3	900	1.724	900	1.724
4	618	1.184	618	1.184
5	548	1.050	548	1.050
6	703	1.347	703	1.347
7	1624	3.111	1624	3.111
8	1918	3.674	1918	3.674
9	2186	4.188	2186	4.188
10	2495	4.780	2495	4.780
11	2652	5.080	2652	5.080
12	2988	5.724	2988	5.724
13	3110	5.958	3110	5.958
14	2997	5.741	2997	5.741
15	2859	5.477	2859	5.477
16	2816	5.395	2816	5.395
17	2977	5.703	2977	5.703
18	2867	5.492	2867	5.492
19	2893	5.542	2893	5.542
20	3239	6.205	3239	6.205
21	2172	4.161	2172	4.161
22	1813	3.473	1813	3.473
23	2030	3.889	2030	3.889
24	3272	6.268	3272	6.268
TOTAL	52200	100.000	52200	100.000

Average Weekend/Weekday Conversion Factor

74.81

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

MONITOR # 28
****

ROUTE TYPE = 1
AREA TYPE = 3
LINKS COUNTED = 1
WEEKDAY TRAFFIC

LINK ID# INTER-ST 676 ALL LINKS

HOUR	BOTH #	%	Total	%
1	530	1.461	530	1.461
2	268	0.739	268	0.739
3	208	0.574	208	0.574
4	156	0.430	156	0.430
5	230	0.634	230	0.634
6	489	1.348	489	1.348
7	1879	5.181	1879	5.181
8	3632	10.015	3632	10.015
9	2862	7.891	2862	7.891
10	1839	5.071	1839	5.071
11	1699	4.685	1699	4.685
12	1658	4.572	1658	4.572
13	1728	4.765	1728	4.765
14	1731	4.773	1731	4.773
15	1938	5.344	1938	5.344
16	2636	7.268	2636	7.268
17	3700	10.202	3700	10.202
18	2816	7.765	2816	7.765
19	1537	4.238	1537	4.238
20	1180	3.254	1180	3.254
21	963	2.655	963	2.655
22	864	2.382	864	2.382
23	917	2.528	917	2.528
24	807	2.225	807	2.225
TOTAL	36267	100.000	36267	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 3
LINKS COUNTED = 1
WEEKEND TRAFFIC

MONITOR # 28
LINK ID# INTER-ST 676 **ALL LINKS**

HOUR	BOTH #	%	Total	%
1	731	3.092	731	3.092
2	412	1.743	412	1.743
3	335	1.417	335	1.417
4	271	1.146	271	1.146
5	200	0.846	200	0.846
6	297	1.256	297	1.256
7	775	3.278	775	3.278
8	1024	4.331	1024	4.331
9	1045	4.420	1045	4.420
10	1244	5.262	1244	5.262
11	1291	5.461	1291	5.461
12	1381	5.841	1381	5.841
13	1566	6.624	1566	6.624
14	1391	5.884	1391	5.884
15	1405	5.943	1405	5.943
16	1397	5.909	1397	5.909
17	1349	5.706	1349	5.706
18	1168	4.940	1168	4.940
19	1238	5.236	1238	5.236
20	1152	4.873	1152	4.873
21	1119	4.733	1119	4.733
22	940	3.976	940	3.976
23	981	4.149	981	4.149
24	930	3.934	930	3.934
TOTAL	23642	100.000	23642	100.000

Average Weekend/Weekday Conversion Factor

65.19

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 4
LINKS COUNTED = 1
WEEKDAY TRAFFIC

MONITOR # 8
LINK ID# INTER-ST 76 ALL LINKS

HOUR	BOTH #	%	Total	%
1	1414	1.505	1414	1.505
2	856	0.911	856	0.911
3	647	0.689	647	0.689
4	734	0.781	734	0.781
5	812	0.865	812	0.865
6	1353	1.441	1353	1.441
7	3839	4.087	3839	4.087
8	7182	7.647	7182	7.647
9	6383	6.796	6383	6.796
10	5570	5.930	5570	5.930
11	5455	5.808	5455	5.808
12	5274	5.615	5274	5.615
13	5007	5.331	5007	5.331
14	4933	5.252	4933	5.252
15	5291	5.633	5291	5.633
16	5987	6.374	5987	6.374
17	6733	7.169	6733	7.169
18	6918	7.366	6918	7.366
19	5327	5.672	5327	5.672
20	3802	4.048	3802	4.048
21	3043	3.240	3043	3.240
22	2858	3.043	2858	3.043
23	2413	2.569	2413	2.569
24	2092	2.227	2092	2.227
TOTAL	93923	100.000	93923	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 4
LINKS COUNTED = 1
WEEKEND TRAFFIC

MONITOR # 8
LINK ID# INTER-ST 76 ALL LINKS

HOUR	BOTH #	%	Total	%
1	1802	2.497	1802	2.497
2	1203	1.667	1203	1.667
3	982	1.361	982	1.361
4	652	0.904	652	0.904
5	518	0.718	518	0.718
6	750	1.039	750	1.039
7	1357	1.881	1357	1.881
8	2074	2.874	2074	2.874
9	3143	4.356	3143	4.356
10	3939	5.459	3939	5.459
11	4317	5.983	4317	5.983
12	4846	6.716	4846	6.716
13	4741	6.571	4741	6.571
14	4581	6.349	4581	6.349
15	4276	5.926	4276	5.926
16	4191	5.808	4191	5.808
17	4181	5.794	4181	5.794
18	4536	6.286	4536	6.286
19	4499	6.235	4499	6.235
20	3591	4.977	3591	4.977
21	2937	4.070	2937	4.070
22	3283	4.550	3283	4.550
23	3746	5.192	3746	5.192
24	2010	2.786	2010	2.786
TOTAL	72155	100.000	72155	100.000

Average Weekend/Weekday Conversion Factor

76.82

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 5
LINKS COUNTED = 1
WEEKDAY TRAFFIC

MONITOR # 34
LINK ID# INTER-ST 295 ALL LINKS

HOUR	BOTH #	%	Total	%
1	805	1.712	805	1.712
2	546	1.161	546	1.161
3	583	1.240	583	1.240
4	533	1.133	533	1.133
5	649	1.380	649	1.380
6	887	1.886	887	1.886
7	2102	4.470	2102	4.470
8	3620	7.698	3620	7.698
9	2806	5.967	2806	5.967
10	2360	5.018	2360	5.018
11	2366	5.031	2366	5.031
12	2434	5.176	2434	5.176
13	2426	5.159	2426	5.159
14	2448	5.205	2448	5.205
15	2413	5.131	2413	5.131
16	2863	6.088	2863	6.088
17	4059	8.631	4059	8.631
18	3381	7.189	3381	7.189
19	2421	5.148	2421	5.148
20	1963	4.174	1963	4.174
21	1612	3.428	1612	3.428
22	1399	2.975	1399	2.975
23	1223	2.601	1223	2.601
24	1129	2.401	1129	2.401
TOTAL	47028	100.000	47028	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1
AREA TYPE = 5
LINKS COUNTED = 1
WEEKEND TRAFFIC

MONITOR # 34
LINK ID# INTER-ST 295

ALL LINKS

HOUR	BOTH #	%	Total	%
1	913	2.785	913	2.785
2	608	1.855	608	1.855
3	501	1.528	501	1.528
4	411	1.254	411	1.254
5	397	1.211	397	1.211
6	506	1.543	506	1.543
7	897	2.736	897	2.736
8	1318	4.020	1318	4.020
9	1505	4.591	1505	4.591
10	1775	5.414	1775	5.414
11	1993	6.079	1993	6.079
12	2063	6.293	2063	6.293
13	1988	6.064	1988	6.064
14	1988	6.064	1988	6.064
15	1925	5.872	1925	5.872
16	1858	5.667	1858	5.667
17	1835	5.597	1835	5.597
18	1918	5.850	1918	5.850
19	1821	5.555	1821	5.555
20	1666	5.082	1666	5.082
21	1253	3.822	1253	3.822
22	1230	3.752	1230	3.752
23	1257	3.834	1257	3.834
24	1158	3.532	1158	3.532
TOTAL	32734	100.000	32784	100.000

Average Weekend/Weekday Conversion Factor

69.72

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 3
AREA TYPE = 3
LINKS COUNTED = 3
WEEKDAY TRAFFIC

LINK ID#	MONITOR # 7 CASTOR AV.		MONITOR # 7 FRANKFRD AV.		MONITOR # 8 BELLMONT AV.		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	BOTH #	%	Total	%
1	212	1.538	130	1.579	116	0.947	458	1.337
2	138	1.001	75	0.911	60	0.490	273	0.797
3	94	0.682	68	0.826	38	0.310	200	0.584
4	96	0.697	41	0.498	14	0.114	151	0.441
5	106	0.769	56	0.680	32	0.261	194	0.566
6	240	1.742	78	0.947	73	0.596	391	1.141
7	711	5.160	272	3.303	324	2.646	1307	3.815
8	853	6.190	376	4.566	718	5.864	1947	5.683
9	793	5.755	426	5.174	931	7.604	2150	6.276
10	746	5.414	444	5.392	694	5.668	1884	5.499
11	734	5.327	427	5.186	626	5.113	1787	5.216
12	823	5.972	493	5.987	768	6.272	2084	6.083
13	817	5.929	481	5.842	784	6.403	2082	6.077
14	837	6.074	475	5.769	795	6.493	2107	6.150
15	872	6.328	539	6.546	784	6.403	2195	6.407
16	1035	7.511	580	7.044	812	6.632	2427	7.084
17	1077	7.816	637	7.736	985	8.045	2699	7.878
18	895	6.495	601	7.299	1027	8.388	2523	7.365
19	656	4.761	402	4.882	661	5.399	1719	5.018
20	599	4.347	416	5.052	553	4.516	1568	4.577
21	481	3.491	416	5.052	435	3.553	1332	3.888
22	348	2.525	309	3.753	381	3.112	1038	3.030
23	331	2.402	259	3.145	307	2.507	897	2.618
24	286	2.075	233	2.830	326	2.663	845	2.467
TOTAL	13780	100.000	8234	100.000	12244	100.000	34258	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 3
AREA TYPE = 3
LINKS COUNTED = 3
WEEKEND TRAFFIC

LINK ID#	MONITOR # 7 CASTOR AV.		MONITOR # 7 FRANKFORD AV.		MONITOR # 8 BELLMONT AV.		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	BOTH #	%	Total	%
1	277	2.960	215	3.088	176	2.100	668	2.705
2	191	2.041	169	2.427	106	1.265	466	1.887
3	147	1.571	139	1.996	93	1.110	379	1.534
4	122	1.304	104	1.494	44	0.525	270	1.093
5	81	0.866	89	1.278	22	0.263	192	0.777
6	109	1.165	68	0.977	44	0.525	221	0.895
7	247	2.640	120	1.723	98	1.170	465	1.883
8	316	3.377	147	2.111	193	2.303	656	2.656
9	403	4.307	270	3.878	292	3.485	965	3.907
10	499	5.333	342	4.912	395	4.714	1236	5.004
11	561	5.996	435	6.247	529	6.313	1525	6.174
12	765	8.176	510	7.324	624	7.447	1899	7.689
13	675	7.214	443	6.362	658	7.853	1776	7.191
14	671	7.171	462	6.635	657	7.841	1790	7.247
15	598	6.391	452	6.491	608	7.256	1658	6.713
16	578	6.177	446	6.405	643	7.674	1667	6.749
17	530	5.664	372	5.343	536	6.397	1438	5.822
18	383	4.093	347	4.983	570	6.803	1300	5.263
19	423	4.521	358	5.141	423	5.048	1204	4.875
20	451	4.820	364	5.228	466	5.562	1281	5.186
21	411	4.392	310	4.452	318	3.795	1039	4.207
22	326	3.484	279	4.007	293	3.497	898	3.636
23	282	3.014	268	3.849	325	3.879	875	3.543
24	311	3.324	254	3.648	266	3.175	831	3.365
TOTAL	9357	100.000	6963	100.000	8379	100.000	24699	100.000

Average Weekend/Weekday Conversion Factor

72.10

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 3
AREA TYPE = 4
LINKS COUNTED = 4
WEEKDAY TRAFFIC

LINK ID#	MONITOR # 8 CITY LINE AV		MONITOR # 12 BUSTLETON AV		MONITOR # 12 ROOSEVELT BL		MONITOR # 28 NEW JERSY 70		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	BOTH #	%	BOTH #	%	Total	%
1	765	1.814	350	1.390	945	1.583	874	1.675	2934	1.637
2	446	1.058	150	0.596	559	0.936	420	0.805	1575	0.879
3	343	0.813	119	0.473	448	0.750	310	0.594	1220	0.681
4	176	0.417	78	0.310	261	0.437	188	0.360	703	0.392
5	167	0.396	57	0.226	289	0.484	178	0.341	691	0.386
6	362	0.858	172	0.683	660	1.105	342	0.655	1536	0.857
7	1228	2.912	752	2.988	2504	4.194	1443	2.765	5927	3.307
8	2237	5.305	1430	5.681	3327	5.572	3845	7.368	10839	6.047
9	2410	5.715	1410	5.602	3201	5.361	3594	6.887	10615	5.922
10	2151	5.101	1191	4.732	2678	4.485	2785	5.337	8805	4.913
11	2184	5.179	1297	5.153	2759	4.621	2672	5.120	8912	4.972
12	2449	5.808	1350	5.363	3037	5.087	2839	5.440	9675	5.398
13	2656	6.298	1504	5.975	3052	5.112	3377	6.471	10589	5.908
14	2506	5.943	1437	5.709	3177	5.321	3198	6.128	10318	5.757
15	2522	5.981	1549	6.154	3465	5.803	2996	5.741	10532	5.876
16	2596	6.156	1597	6.345	4200	7.034	3111	5.961	11504	6.418
17	2752	6.526	1870	7.429	4523	7.575	4057	7.774	13202	7.366
18	2794	6.626	1925	7.648	4476	7.497	4078	7.814	13273	7.405
19	2482	5.886	1581	6.281	3740	6.264	3010	5.768	10813	6.033
20	2197	5.210	1507	5.987	3416	5.721	2625	5.030	9745	5.437
21	2054	4.871	1387	5.510	2998	5.021	2014	3.859	8453	4.716
22	1751	4.152	1096	4.354	2471	4.139	1633	3.129	6951	3.878
23	1638	3.884	759	3.015	1903	3.187	1414	2.710	5714	3.188
24	1303	3.090	603	2.396	1617	2.708	1183	2.267	4706	2.626
TOTAL	42169	100.000	25171	100.000	59706	100.000	52186	100.000	179232	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 3
AREA TYPE = 4
LINKS COUNTED = 4
WEEKEND TRAFFIC

LINK ID#	MONITOR # 8 CITY LINE AV		MONITOR # 12 BUSTLETON AV		MONITOR # 12 ROOSEVELT BL		MONITOR # 28 NEW JERSY 70		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	BOTH #	%	BOTH #	%	Total	%
1	1047	2.864	552	2.350	1533	2.983	1091	2.931	4223	2.841
2	764	2.090	336	1.431	1004	1.954	703	1.889	2807	1.888
3	716	1.959	275	1.171	778	1.514	511	1.373	2280	1.534
4	371	1.015	136	0.579	456	0.887	358	0.962	1321	0.889
5	232	0.635	86	0.366	325	0.632	201	0.540	844	0.568
6	282	0.771	118	0.502	354	0.689	269	0.723	1023	0.688
7	613	1.677	280	1.192	850	1.654	625	1.679	2368	1.593
8	962	2.632	491	2.091	1154	2.246	1126	3.025	3733	2.511
9	1331	3.641	848	3.611	1576	3.067	1459	3.920	5214	3.508
10	1817	4.970	1051	4.475	1980	3.853	1902	5.110	6750	4.541
11	2015	5.512	1283	5.463	2413	4.696	2187	5.876	7898	5.313
12	2225	6.087	1558	6.633	2960	5.760	2439	6.553	9182	6.177
13	2334	6.385	1704	7.255	3527	6.864	2680	7.201	10245	6.892
14	2326	6.363	1670	7.110	3509	6.829	2531	6.800	10036	6.751
15	2353	6.437	1623	6.910	3515	6.840	2354	6.325	9845	6.623
16	2253	6.163	1619	6.893	3575	6.957	2283	6.134	9730	6.546
17	2173	5.944	1613	6.868	3409	6.634	2223	5.973	9418	6.336
18	2145	5.868	1476	6.284	3280	6.383	2287	6.145	9188	6.181
19	2063	5.643	1401	5.965	3032	5.900	2007	5.392	8503	5.720
20	1993	5.452	1314	5.595	3119	6.070	1970	5.293	8396	5.648
21	1867	5.107	1296	5.518	2828	5.503	1686	4.530	7677	5.165
22	1581	4.325	1131	4.815	2416	4.702	1528	4.105	6656	4.478
23	1617	4.423	875	3.725	1939	3.773	1455	3.909	5886	3.960
24	1476	4.038	751	3.198	1855	3.610	1344	3.611	5426	3.650
TOTAL	36556	100.000	23487	100.000	51387	100.000	37219	100.000	148649	100.000

Average Weekend/Weekday Conversion Factor

82.94

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 4
AREA TYPE = 1
LINKS COUNTED = 2
WEEKDAY TRAFFIC

LINK ID#	MONITOR # 5 SPRUCE ST.		MONITOR # 5 BROAD ST.		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	Total	%
1	290	2.053	715	2.735	1005	2.496
2	144	1.019	461	1.764	605	1.502
3	99	0.701	355	1.358	454	1.127
4	59	0.418	238	0.911	297	0.738
5	48	0.340	255	0.976	303	0.752
6	96	0.679	338	1.293	434	1.078
7	387	2.739	635	2.429	1022	2.538
8	796	5.634	1058	4.048	1854	4.604
9	972	6.879	1563	5.980	2535	6.295
10	781	5.528	1475	5.643	2256	5.602
11	733	5.188	1419	5.429	2152	5.344
12	760	5.379	1420	5.432	2180	5.414
13	832	5.889	1606	6.144	2438	6.054
14	760	5.379	1536	5.876	2296	5.702
15	839	5.938	1581	6.048	2420	6.010
16	915	6.476	1486	5.685	2401	5.963
17	1111	7.863	1775	6.791	2886	7.167
18	1031	7.297	1603	6.133	2634	6.541
19	726	5.138	1244	4.759	1970	4.892
20	679	4.806	1131	4.327	1810	4.495
21	584	4.133	990	3.787	1574	3.909
22	491	3.475	981	3.753	1472	3.656
23	540	3.822	1196	4.576	1736	4.311
24	456	3.227	1078	4.124	1534	3.809
TOTAL	14129	100.000	26139	100.000	40268	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 4
AREA TYPE = 1
LINKS COUNTED = 2
WEEKEND TRAFFIC

LINK ID#	MONITOR # 5 SPRUCE ST.		MONITOR # 5 BROAD ST.		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	Total	%
1	424	3.936	1175	5.138	1599	4.753
2	288	2.674	927	4.054	1215	3.612
3	216	2.005	919	4.019	1135	3.374
4	131	1.216	585	2.558	716	2.128
5	79	0.733	444	1.941	523	1.555
6	85	0.789	346	1.513	431	1.281
7	225	2.089	408	1.784	633	1.882
8	384	3.565	564	2.466	948	2.818
9	452	4.196	775	3.389	1227	3.647
10	442	4.104	931	4.071	1373	4.081
11	523	4.856	1012	4.425	1535	4.563
12	654	6.072	1148	5.020	1802	5.357
13	613	5.691	1259	5.505	1872	5.565
14	631	5.858	1341	5.864	1972	5.862
15	585	5.431	1259	5.505	1844	5.482
16	696	6.462	1059	4.631	1755	5.217
17	648	6.016	1167	5.103	1815	5.395
18	545	5.060	1048	4.583	1593	4.735
19	577	5.357	1078	4.714	1655	4.920
20	561	5.208	977	4.272	1538	4.572
21	495	4.596	1049	4.587	1544	4.590
22	498	4.624	1117	4.884	1615	4.801
23	515	4.781	1097	4.797	1612	4.792
24	504	4.679	1184	5.177	1688	5.018
TOTAL	10771	100.000	22869	100.000	33640	100.000

Average Weekend/Weekday Conversion Factor

83.54

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 4
AREA TYPE = 5
LINKS COUNTED = 1
WEEKDAY TRAFFIC

LINK ID#	MONITOR # 34 KINGS HWY		ALL LINKS	
HOUR	BOTH #	%	Total	%
1	52	0.946	52	0.946
2	25	0.455	25	0.455
3	11	0.200	11	0.200
4	9	0.164	9	0.164
5	19	0.346	19	0.346
6	50	0.909	50	0.909
7	145	2.637	145	2.637
8	215	3.911	215	3.911
9	246	4.474	246	4.474
10	268	4.874	268	4.874
11	292	5.311	292	5.311
12	285	5.184	285	5.184
13	378	6.875	378	6.875
14	347	6.311	347	6.311
15	350	6.366	350	6.366
16	386	7.021	386	7.021
17	474	8.621	474	8.621
18	409	7.439	409	7.439
19	409	7.439	409	7.439
20	372	6.766	372	6.766
21	291	5.293	291	5.293
22	209	3.801	209	3.801
23	149	2.710	149	2.710
24	107	1.946	107	1.946
TOTAL	5498	100.000	5498	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 4
AREA TYPE = 5
LINKS COUNTED = 1
WEEKEND TRAFFIC

LINK ID#	MONITOR # 34 KINGS HWY		ALL LINKS	
HOUR	BOTH #	%	Total	%
1	96	1.959	96	1.959
2	38	0.776	38	0.776
3	35	0.714	35	0.714
4	15	0.306	15	0.306
5	12	0.245	12	0.245
6	34	0.694	34	0.694
7	69	1.408	69	1.408
8	117	2.388	117	2.388
9	190	3.878	190	3.878
10	322	6.571	322	6.571
11	415	8.469	415	8.469
12	417	8.510	417	8.510
13	363	7.408	363	7.408
14	335	6.837	335	6.837
15	331	6.755	331	6.755
16	318	6.490	318	6.490
17	318	6.490	318	6.490
18	257	5.245	257	5.245
19	275	5.612	275	5.612
20	248	5.061	248	5.061
21	217	4.429	217	4.429
22	203	4.143	203	4.143
23	159	3.245	159	3.245
24	116	2.367	116	2.367
TOTAL	4900	100.000	4900	100.000

Average Weekend/Weekday Conversion Factor

89.12

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 5
AREA TYPE = 3
LINKS COUNTED = 3
WEEKDAY TRAFFIC

LINK ID#	MONITOR # 12 ASHTON RD.		MONITOR # 28 BROWNING RD.		MONITOR # 7 SUSQ'HANA RD		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	NORT #	%	Total	%
1	167	1.785	23	1.340	29	1.986	219	1.748
2	74	0.791	10	0.583	9	0.616	93	0.742
3	56	0.599	3	0.175	11	0.753	70	0.559
4	38	0.406	3	0.175	5	0.342	46	0.367
5	55	0.588	3	0.175	12	0.822	70	0.559
6	80	0.855	12	0.699	15	1.027	107	0.854
7	353	3.773	40	2.331	62	4.247	455	3.631
8	517	5.526	121	7.051	100	6.849	738	5.889
9	488	5.216	125	7.284	90	6.164	703	5.610
10	349	3.731	78	4.545	70	4.795	497	3.966
11	407	4.351	63	3.671	70	4.795	540	4.309
12	460	4.917	84	4.895	88	6.027	632	5.043
13	500	5.345	90	5.245	83	5.685	673	5.371
14	521	5.569	94	5.478	99	6.781	714	5.698
15	491	5.249	79	4.604	92	6.301	662	5.283
16	590	6.307	105	6.119	97	6.644	792	6.320
17	633	6.766	148	8.625	109	7.466	890	7.102
18	746	7.974	168	9.790	80	5.479	994	7.932
19	615	6.574	107	6.235	87	5.959	809	6.456
20	541	5.783	115	6.702	50	3.425	706	5.634
21	574	6.136	93	5.420	64	4.384	731	5.834
22	395	4.222	71	4.138	50	3.425	516	4.118
23	385	4.115	40	2.331	43	2.945	468	3.735
24	320	3.421	41	2.389	45	3.082	406	3.240
TOTAL	9355	100.000	1716	100.000	1460	100.000	12531	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 5
AREA TYPE = 3
LINKS COUNTED = 3
WEEKEND TRAFFIC

LINK ID#	MONITOR # 12 ASHTON RD.		MONITOR # 28 BROWNING RD		MONITOR # 7 SUSQ'HANA RD		ALL LINKS	
HOUR	BOTH #	%	BOTH #	%	PORT #	%	Total	%
1	254	3.208	25	1.825	25	1.947	304	2.876
2	162	2.046	18	1.314	20	1.558	200	1.892
3	119	1.503	11	0.803	28	2.181	158	1.495
4	77	0.973	2	0.146	23	1.791	102	0.965
5	56	0.707	2	0.146	16	1.246	74	0.700
6	48	0.606	4	0.292	12	0.935	64	0.605
7	130	1.642	15	1.095	21	1.636	166	1.570
8	207	2.615	37	2.701	40	3.115	284	2.687
9	239	3.019	44	3.212	67	5.218	350	3.311
10	271	3.423	53	3.869	66	5.140	390	3.689
11	390	4.926	73	5.328	94	7.321	557	5.269
12	479	6.050	77	5.620	102	7.944	658	6.225
13	577	7.288	90	6.569	93	7.243	760	7.189
14	540	6.821	117	8.540	89	6.931	746	7.057
15	512	6.467	103	7.518	71	5.530	686	6.489
16	544	6.871	91	6.642	74	5.763	709	6.707
17	504	6.366	95	6.934	65	5.062	664	6.281
18	459	5.798	103	7.518	52	4.050	614	5.808
19	455	5.747	90	6.569	77	5.997	622	5.884
20	462	5.836	97	7.080	56	4.361	615	5.818
21	429	5.419	74	5.401	54	4.206	557	5.269
22	349	4.408	61	4.453	45	3.505	455	4.304
23	344	4.345	37	2.701	56	4.361	437	4.134
24	310	3.916	51	3.723	38	2.960	399	3.774
TOTAL	7917	100.000	1370	100.000	1284	100.000	10571	100.000

Average Weekend/Weekday Conversion Factor

84.36

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 5
AREA TYPE = 5
LINKS COUNTED = 1
WEEKDAY TRAFFIC

	MONITOR # 34			
LINK ID#	COWHAWKIN RD		ALL LINKS	
HOUR	BOTH #	%	Total	%
1	56	1.071	56	1.071
2	51	0.976	51	0.976
3	21	0.402	21	0.402
4	22	0.421	22	0.421
5	48	0.918	48	0.918
6	81	1.550	81	1.550
7	194	3.711	194	3.711
8	374	7.155	374	7.155
9	272	5.204	272	5.204
10	230	4.400	230	4.400
11	294	5.625	294	5.625
12	285	5.452	285	5.452
13	308	5.892	308	5.892
14	291	5.567	291	5.567
15	293	5.606	293	5.606
16	359	6.868	359	6.868
17	455	8.705	455	8.705
18	353	6.753	353	6.753
19	320	6.122	320	6.122
20	270	5.165	270	5.165
21	212	4.056	212	4.056
22	162	3.099	162	3.099
23	157	3.004	157	3.004
24	119	2.277	119	2.277
TOTAL	5227	100.000	5227	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 5
AREA TYPE = 5
LINKS COUNTED = 1
WEEKEND TRAFFIC

LINK ID	MONITOR # 34 COWHAWKIN RD		ALL LINKS	
HOUR	BOTH	%	Total	%
1	102	2.499	102	2.499
2	50	1.225	50	1.225
3	39	0.955	39	0.955
4	31	0.759	31	0.759
5	20	0.490	20	0.490
6	52	1.274	52	1.274
7	100	2.450	100	2.450
8	134	3.283	134	3.283
9	160	3.920	160	3.920
10	222	5.439	222	5.439
11	271	6.639	271	6.639
12	285	6.982	285	6.982
13	313	7.668	313	7.668
14	290	7.104	290	7.104
15	258	6.320	258	6.320
16	211	5.169	211	5.169
17	213	5.218	213	5.218
18	229	5.610	229	5.610
19	238	5.830	238	5.830
20	218	5.341	218	5.341
21	189	4.630	189	4.630
22	155	3.797	155	3.797
23	152	3.724	152	3.724
24	150	3.675	150	3.675
TOTAL	4082	100.000	4082	100.000

Average Weekend/Weekday Conversion Factor

78.10

APPENDIX C

HOURLY TRAFFIC FACTORS

FOR WEEK-END TRAFFIC

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 1,2,8
AREA TYPE = ALL
LINKS COUNTED = 4
WEEKEND TRAFFIC

LINK ID#	MONITOR # 5 INTER-ST 95		MONITOR # 34 INTER-ST 295		MONITOR # 28 INTER-ST 676		MONITOR # 8 INTER-ST 76		TOTAL	
HOUR	BOTH #	%	BOTH #	%	BOTH #	%	BOTH #	%		
1	1498	2.870	913	2.785	731	3.092	1802	2.497	4944	2.735
2	1025	1.964	608	1.855	412	1.743	1203	1.667	3248	1.797
3	900	1.724	501	1.528	335	1.417	982	1.361	2718	1.503
4	618	1.184	411	1.254	271	1.146	652	0.904	1952	1.080
5	548	1.050	397	1.211	200	0.846	518	0.718	1663	0.920
6	703	1.347	506	1.543	297	1.256	750	1.039	2256	1.248
7	1624	3.111	897	2.736	775	3.278	1357	1.881	4653	2.574
8	1918	3.674	1318	4.020	1024	4.331	2074	2.874	6334	3.504
9	2186	4.188	1505	4.591	1045	4.420	3143	4.356	7879	4.358
10	2495	4.780	1775	5.414	1244	5.262	3939	5.459	9453	5.229
11	2652	5.080	1993	6.079	1291	5.461	4317	5.983	10253	5.672
12	2988	5.724	2063	6.293	1381	5.841	4846	6.716	11278	6.238
13	3110	5.958	1988	6.064	1566	6.624	4741	6.571	11405	6.309
14	2997	5.741	1988	6.064	1391	5.884	4581	6.349	10957	6.061
15	2859	5.477	1925	5.872	1405	5.943	4276	5.926	10465	5.789
16	2816	5.395	1858	5.667	1397	5.909	4191	5.808	10262	5.676
17	2977	5.703	1835	5.597	1349	5.706	4181	5.794	10342	5.721
18	2867	5.492	1918	5.850	1168	4.940	4536	6.286	10489	5.802
19	2893	5.542	1821	5.555	1238	5.236	4499	6.235	10451	5.781
20	3239	6.205	1666	5.082	1152	4.873	3591	4.977	9648	5.337
21	2172	4.161	1253	3.822	1119	4.733	2937	4.070	7481	4.138
22	1813	3.473	1230	3.752	940	3.976	3283	4.550	7266	4.019
23	2030	3.889	1257	3.834	981	4.149	3746	5.192	8014	4.433
24	3272	6.268	1158	3.532	930	3.934	2010	2.786	7370	4.077
TOTAL	52200	100.000	32784	100.000	23642	100.000	72155	100.000	180781	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 5,6
AREA TYPE = ALL
LINKS COUNTED = 4
WEEK TRAFFIC

LINK ID#	MONITOR # 12 ASHTON RD.		MONITOR # 28 BROWNING RD		MONITOR # 34 COWHAWKIN RD		MONITOR # 7 SUSQ'HANA RD		TOTAL	
HOUR	BOTH #	%	BOTH #	%	BOTH #	%	NORT #	%		
1	254	3.208	25	1.825	102	2.499	25	1.947	406	2.771
2	162	2.046	18	1.314	50	1.225	20	1.558	250	1.706
3	119	1.503	11	0.803	39	0.955	28	2.181	197	1.344
4	77	0.973	2	0.146	31	0.759	23	1.791	133	0.908
5	56	0.707	2	0.146	20	0.490	16	1.246	94	0.642
6	48	0.606	4	0.292	52	1.274	12	0.935	116	0.792
7	130	1.642	15	1.095	100	2.450	21	1.636	266	1.815
8	207	2.615	37	2.701	134	3.283	40	3.115	418	2.853
9	239	3.019	44	3.212	160	3.920	67	5.218	510	3.481
10	271	3.423	53	3.869	222	5.439	66	5.140	612	4.177
11	390	4.926	73	5.328	271	6.639	94	7.321	828	5.651
12	479	6.050	77	5.620	285	6.982	102	7.944	943	6.436
13	577	7.288	90	6.569	313	7.668	93	7.243	1073	7.323
14	540	6.821	117	8.540	290	7.104	89	6.931	1036	7.070
15	512	6.467	103	7.518	258	6.320	71	5.530	944	6.442
16	544	6.871	91	6.642	211	5.169	74	5.763	920	6.279
17	504	6.366	95	6.934	213	5.218	65	5.062	877	5.985
18	459	5.798	103	7.518	229	5.610	52	4.050	843	5.753
19	455	5.747	90	6.569	238	5.830	77	5.997	860	5.869
20	462	5.836	97	7.080	218	5.341	56	4.361	833	5.685
21	429	5.419	74	5.401	189	4.630	54	4.206	746	5.091
22	349	4.408	61	4.453	155	3.797	45	3.505	610	4.163
23	344	4.345	37	2.701	152	3.724	56	4.361	589	4.020
24	310	3.916	51	3.723	150	3.675	38	2.960	549	3.747
TOTAL	7917	100.000	1370	100.000	4082	100.000	1284	100.000	14653	100.000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 3,4
AREA TYPE = all
LINKS COUNTED = 9
WEEKEND TRAFFIC

WITHOUT BROAD STREET COUNTS

	MONTR#34 KINGS HWY		MONTR#8 CTY LN AV		MONTR#8 BELMNT AV		MONTR#7 CASTOR AV		MONTR#12 BUSTLTN A		MONTR#12 ROOS'VLT		MONTR#7 FRNKFRD		MONTR#28 NJ 70		MONTR#5 SPRUCE		TOTAL	
1	96	1.96	1047	2.86	176	2.10	277	2.96	552	2.35	1533	2.98	215	3.09	1091	2.93	424	3.94	5411	2.86
2	38	0.78	764	2.09	106	1.27	191	2.04	336	1.43	1004	1.95	169	2.43	703	1.89	288	2.67	3599	1.90
3	35	0.71	716	1.96	93	1.11	147	1.57	275	1.17	778	1.51	139	2.00	511	1.37	216	2.01	2910	1.54
4	15	0.31	371	1.01	44	0.53	122	1.30	136	0.58	456	0.89	104	1.49	358	0.96	131	1.22	1737	0.92
5	12	0.24	232	0.63	22	0.26	81	0.87	86	0.37	325	0.63	89	1.28	201	0.54	79	0.73	1127	0.60
66	34	0.69	282	0.77	44	0.53	109	1.16	118	0.50	354	0.69	68	0.98	269	0.72	85	0.79	1363	0.72
7	69	1.41	613	1.68	98	1.17	247	2.64	280	1.19	850	1.65	120	1.72	625	1.68	225	2.09	3127	1.65
8	117	2.39	962	2.63	193	2.30	316	3.38	491	2.09	1154	2.25	147	2.11	1126	3.03	384	3.57	4890	2.59
9	190	3.88	1331	3.64	292	3.48	403	4.31	848	3.61	1576	3.07	270	3.88	1459	3.92	452	4.20	6821	3.61
10	322	6.57	1817	4.97	395	4.71	499	5.33	1051	4.47	1980	3.85	342	4.91	1902	5.11	442	4.10	8750	4.63
11	415	8.47	2015	5.51	529	6.31	561	6.00	1283	5.46	2413	4.70	435	6.25	2187	5.88	523	4.86	10361	5.48
12	417	8.51	2225	6.09	624	7.45	765	8.18	1558	6.63	2960	5.76	510	7.32	2439	6.55	654	6.07	12152	6.43
13	363	7.41	2334	6.38	658	7.85	675	7.21	1704	7.26	3527	6.86	443	6.36	2680	7.20	613	5.69	12997	6.88
14	335	6.84	2326	6.36	657	7.84	671	7.17	1670	7.11	3509	6.83	462	6.64	2531	6.80	631	5.86	12792	6.77
15	331	6.76	2353	6.44	608	7.26	598	6.39	1623	6.91	3515	6.84	452	6.49	2354	6.32	585	5.43	12419	6.57
16	318	6.49	2253	6.16	643	7.67	578	6.18	1619	6.89	3575	6.96	446	6.41	2283	6.13	696	6.46	12411	6.57
17	318	6.49	2173	5.94	536	6.40	530	5.66	1613	6.87	3409	6.63	372	5.34	2223	5.97	648	6.02	11822	6.25
18	257	5.24	2145	5.87	570	6.80	383	4.09	1476	6.28	3280	6.38	347	4.98	2287	6.14	545	5.06	11290	5.97
19	275	5.61	2063	5.64	423	5.05	423	4.52	1401	5.97	3032	5.90	358	5.14	2007	5.39	577	5.36	10559	5.59
20	248	5.06	1993	5.45	466	5.56	451	4.82	1314	5.59	3119	6.07	364	5.23	1970	5.29	561	5.21	10486	5.55
21	217	4.43	1867	5.11	318	3.80	411	4.39	1296	5.52	2828	5.50	310	4.45	1686	4.53	495	4.60	9428	4.99
22	203	4.14	1581	4.32	293	3.50	326	3.48	1131	4.82	2416	4.70	279	4.01	1528	4.11	498	4.62	8255	4.37
23	159	3.24	1617	4.42	325	3.88	282	3.01	875	3.73	1939	3.77	268	3.85	1455	3.91	515	4.78	7435	3.93
24	116	2.37	1476	4.04	266	3.17	311	3.32	751	3.20	1855	3.61	254	3.65	1344	3.61	504	4.68	6877	3.64
	4900100.00		36556100.00		8379100.00		9357100.00		23487100.00		51387100.00		6963100.00		37219100.00		10771100.00		189019100.00	

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TOTAL SUSPENDED PARTICULATE MODELING STUDY

ROUTE TYPE = 3, 4
AREA TYPE = ALL
LINKS COUNTED = 10
WEEKEND TRAFFIC

	MONTR#34		MONTR#8		MONTR#8		MONTR#7		MONTR#12		MONTR#12		MONTR#7		MONTR#28		MONTR#5		MONTR#5		TOTAL	
	KINGS HWY		CTY LN AV		BELMNT AV		CASTOR AV		BUSTLTN A		ROOS'VLT		FRNKFRD		NJ 70		SPRUCE		BROAD			
1	96	1.96	1047	2.86	176	2.10	277	2.96	552	2.35	1533	2.98	215	3.09	1091	2.93	424	3.94	1175	5.14	6586	3.11
2	38	0.78	764	2.09	106	1.27	191	2.04	336	1.43	1004	1.95	169	2.43	703	1.89	288	2.67	927	4.05	4526	2.14
3	35	0.71	716	1.96	93	1.11	147	1.57	275	1.17	778	1.51	139	2.00	511	1.37	216	2.01	919	4.02	3829	1.81
4	15	0.31	371	1.01	44	0.53	122	1.30	136	0.58	456	0.89	104	1.49	358	0.96	131	1.22	585	2.56	2322	1.10
5	12	0.24	232	0.63	22	0.26	81	0.87	86	0.37	325	0.63	89	1.28	201	0.54	79	0.73	444	1.94	1571	0.74
6	34	0.69	282	0.77	44	0.53	109	1.16	118	0.50	354	0.69	68	0.98	269	0.72	85	0.79	346	1.51	1709	0.81
7	69	1.41	613	1.68	98	1.17	247	2.64	280	1.19	850	1.65	120	1.72	625	1.68	225	2.09	408	1.78	3535	1.67
8	117	2.39	962	2.63	193	2.30	316	3.38	491	2.09	1154	2.25	147	2.11	1126	3.03	384	3.57	564	2.47	5454	2.57
9	190	3.88	1331	3.64	292	3.48	403	4.31	848	3.61	1576	3.07	270	3.88	1459	3.92	452	4.20	775	3.39	7596	3.58
10	322	6.57	1817	4.97	395	4.71	499	5.33	1051	4.47	1980	3.85	342	4.91	1902	5.11	442	4.10	931	4.07	9681	4.57
11	415	8.47	2015	5.51	529	6.31	561	6.00	1283	5.46	2413	4.70	435	6.25	2187	5.88	523	4.86	1012	4.43	11373	5.37
12	417	8.51	2225	6.09	624	7.45	765	8.18	1558	6.63	2960	5.76	510	7.32	2439	6.55	654	6.07	1148	5.02	13300	6.28
13	363	7.41	2334	6.38	658	7.85	675	7.21	1704	7.26	3527	6.86	443	6.36	2680	7.20	613	5.69	1259	5.51	14256	6.73
14	335	6.84	2326	6.36	657	7.84	671	7.17	1670	7.11	3509	6.83	462	6.64	2531	6.80	631	5.86	1341	5.86	14133	6.67
15	331	6.76	2353	6.44	608	7.26	598	6.39	1623	6.91	3515	6.84	452	6.49	2354	6.32	585	5.43	1259	5.51	13678	6.46
16	318	6.49	2253	6.16	643	7.67	578	6.18	1619	6.89	3575	6.96	446	6.41	2283	6.13	696	6.46	1059	4.63	13470	6.36
17	318	6.49	2173	5.94	536	6.40	530	5.66	1613	6.87	3409	6.63	372	5.34	2223	5.97	648	6.02	1167	5.10	12989	6.13
18	257	5.24	2145	5.87	570	6.80	383	4.09	1476	6.28	3280	6.38	347	4.98	2287	6.14	545	5.06	1048	4.58	12338	5.82
19	275	5.61	2063	5.64	423	5.05	423	4.52	1401	5.97	3032	5.90	358	5.14	2007	5.39	577	5.36	1078	4.71	11637	5.49
20	248	5.06	1993	5.45	466	5.56	451	4.82	1314	5.59	3119	6.07	364	5.23	1970	5.29	561	5.21	977	4.27	11463	5.41
21	217	4.43	1867	5.11	318	3.80	411	4.39	1296	5.52	2828	5.50	310	4.45	1686	4.53	495	4.60	1049	4.59	10477	4.94
22	203	4.14	1581	4.32	293	3.50	326	3.48	1131	4.82	2416	4.70	279	4.01	1528	4.11	498	4.62	1117	4.88	9372	4.42
23	159	3.24	1617	4.42	325	3.88	282	3.01	875	3.73	1939	3.77	268	3.85	1455	3.91	515	4.78	1097	4.80	8532	4.03
24	116	2.37	1476	4.04	266	3.17	311	3.32	751	3.20	1855	3.61	254	3.65	1344	3.61	504	4.68	1184	5.18	8061	3.80
	4900100.00		36556100.00		8379100.00		9357100.00		23487100.00		51387100.00		6963100.00		37219100.00		10771100.00		22869100.00		211888100.00	

DELAWARE VALLEY
REGIONAL PLANNING COMMISSION
The Bourse Building, 21 South 5th St., Philadelphia, PA 19106 (215) 592-1800

DATE: 04/18/83

FROM: R.J. FIJALKOWSKI

TO: File: "1982 Particulate/SO2 Inventory"

SUBJECTS: "Traffic Data" - Memorandum # 2

I. INTRODUCTION

The purpose of this memorandum is to further clarify and expand on on issues related to traffic behavior as described in memorandum no. 1 dated October 14,1982, and its impact on the "1982 Particulate/SO2 Inventory".

Particular topics which are covered below include:

A. Description of count procedures and rationale for developing the the weekend vs. weekday travel variation adjustements in memorandum no. 1 ;
B. Hourly Variation of Weekday Travel;
C. Single Unit Heavy-Truck Survey;
D. Silt Loading Roadway Classifications;

II. COUNT PROCEDURES & DURATION

AS cited in memorandum no. 1, 18 links were counted during the period from Wednesday August 11,1982 to Monday August 30,1982 in order to establish typical weekday vs. weekend travel variations for the Inventory. During this period, six links were counted per week for four continuous days from Thursday through Sunday using portable, battery powered, tube type, two-cycle axle counters. Machines were set by DVRPC personnel on Wednesday of each week at six of the selected sites and retrieved on the following Monday.

Based upon typical daily travel variations recorded in the DVRPC Region, the Thursday and Saturday counts were used to develop the weekend vs. weekday travel variations.

Figure 1 presents daily variations in travel by area for a typical August week, as defined by the Pennsylvania Department of Transportation for the DVRPC region. As indicated on Figure 1, of the two weekdays counted in the survey Thursday best represents an average weekday. During August, Friday volumes markedly increase by as much as 20% above normal weekday conditions, due to the increase of recreational travel. Because of this phenomenon, the New Jersey Department of Transportation considers only Tuesday through Thursday counts in deriving average weekday volumes.

Similarly in comparing Saturday vs. Sunday volumes, a sharp decline in Sunday travel is observed due to the absence of work travel. Again because of this pattern, Saturday was selected as the more critical modelling day for developing the weekend travel adjustement factors discussed in memorandum no. 1.

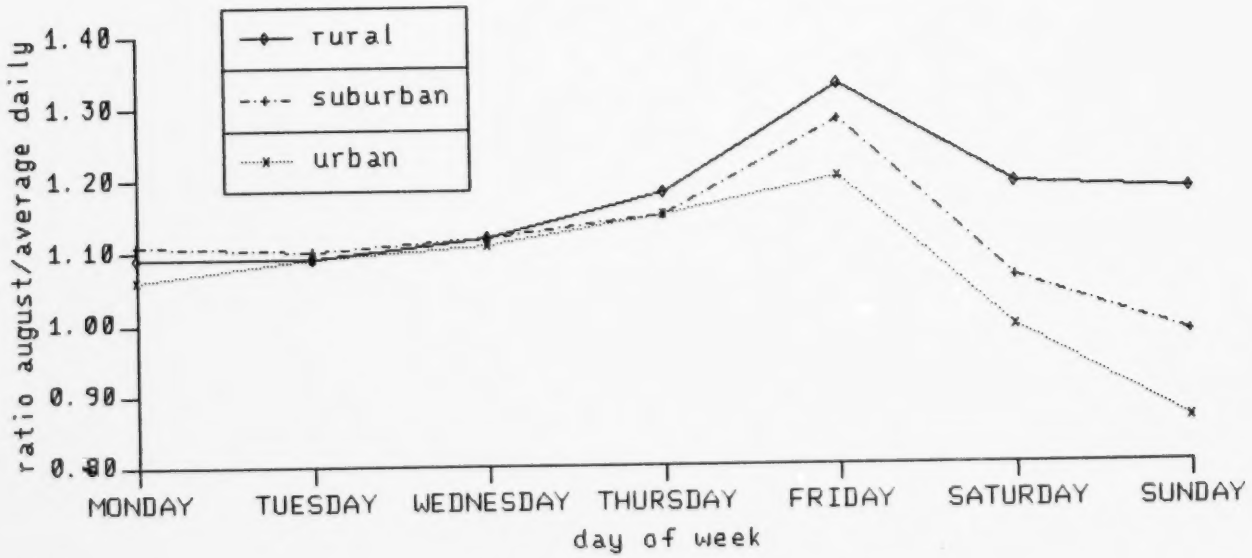
III. Weekday Hourly Travel Variation

While memorandum no. 1 illustrated the hourly variations in weekend travel recorded during the survey, no discussion was contained concerning the weekday travel variations and the associated hourly adjustements to be used for the inventory.

For previous DVRPC emission inventories including the recently completed 1982 SIP, average hourly weekday travel variations were developed from a study conducted by US DOT which typified such variations by city size (See: Federal Highway Administration, "An Analysis of Urban Area Travel by Time of Day", Washington, D.C.: U.S. Department of Transoportation, January 1972). Figure 2 through 11 compare these default regional variations by route and area, to those collected near the monitor locations during the survey. The level of correlation between the default profiles and the survey supports the validity of the US DOT study, especially when considering the limited nature of the current sample (18 of approximately 20,000 network links). The deviation between the hourly travel fractions from the Study versus the sample is within one percent, in four of the ten stratifications included in the survey. In five of the remaining six strata the default values exceed the morning and/or evening peaking characteristic recorded during the survey, while in the remaining strata the difference is simply a shifting of the evening peak from the 6 p.m. default to 5 p.m.. The table below summarizes the differences by route and area.

FIGURE 1

August Variation Daily Travel DVRPC Region



Source: DVRPC Coverage Count Program Adjustement Factors

FIGURE 2

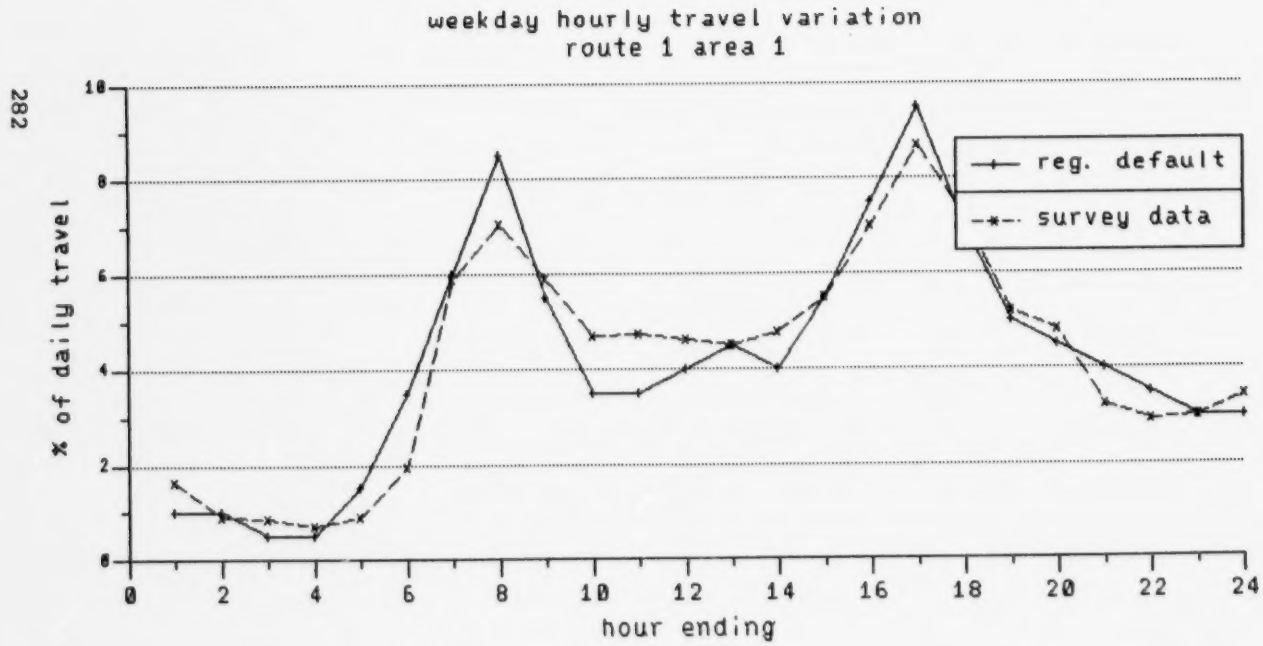

weekday hourly travel variation
route 1 area 1
% of daily travel
hour ending
reg. default
survey data
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FIGURE 3

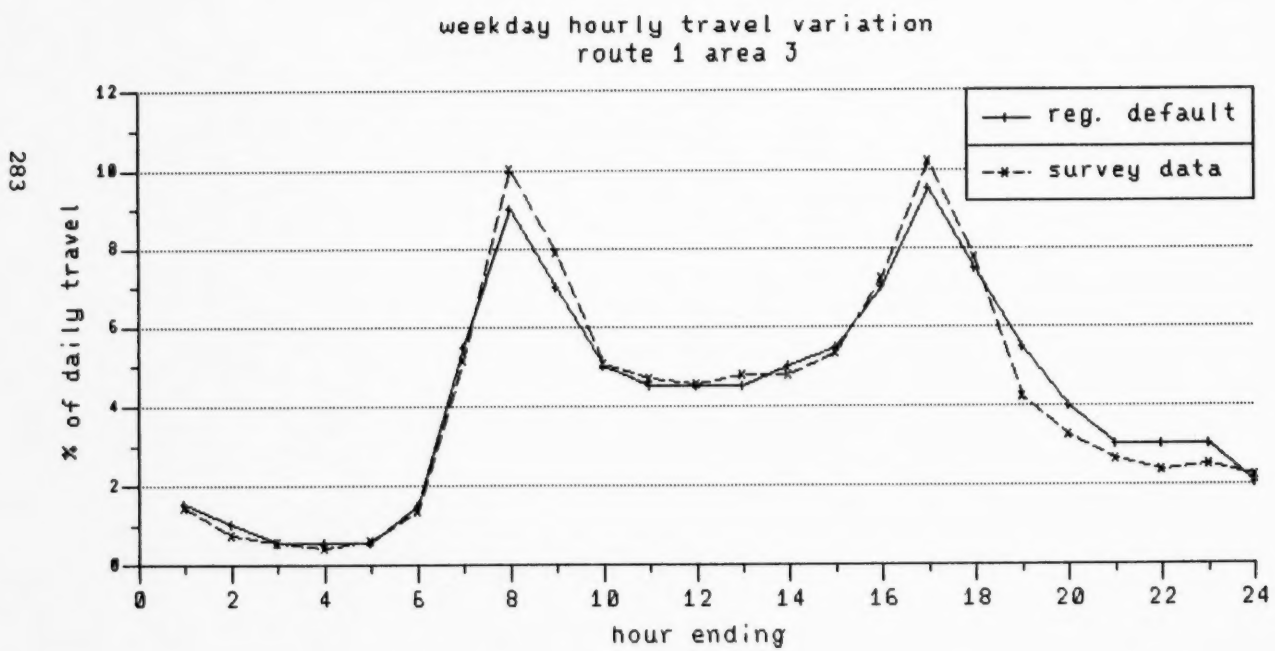
weekday hourly travel variation
route 1 area 3
reg. default
survey data
% of daily travel
hour ending
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FIGURE 4

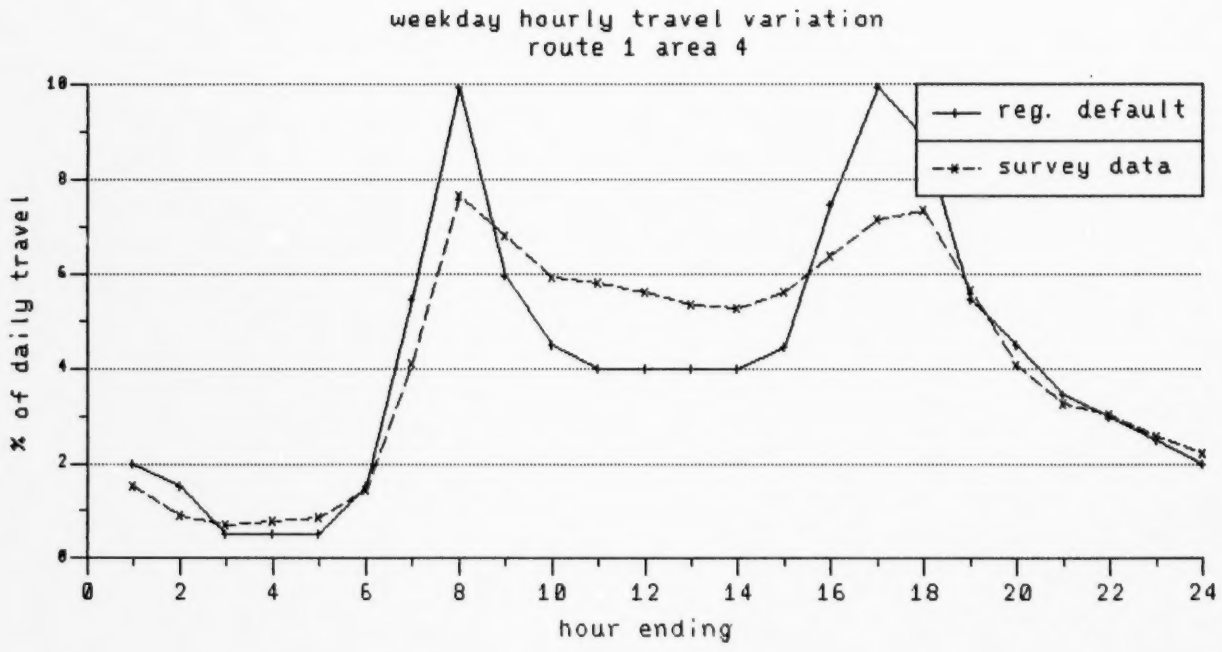
weekday hourly travel variation
route 1 area 4
reg. default
survey data
% of daily travel
hour ending
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FIGURE 5

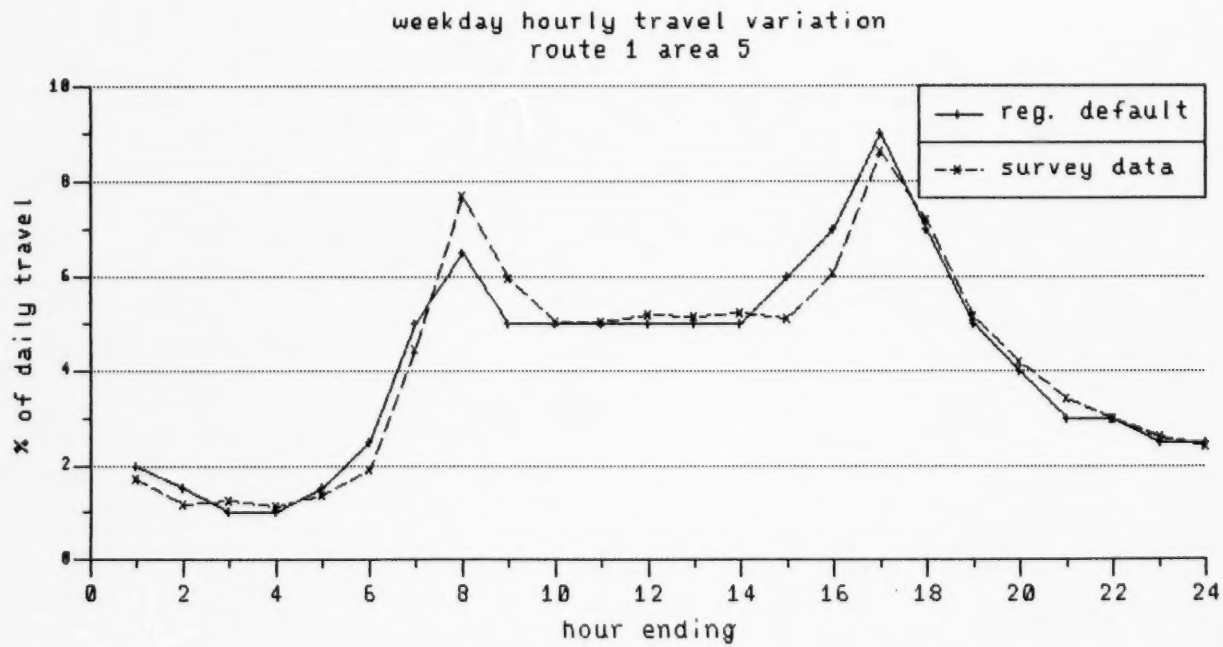
weekday hourly travel variation
route 1 area 5
reg. default
survey data
% of daily travel
hour ending
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FIGURE 6

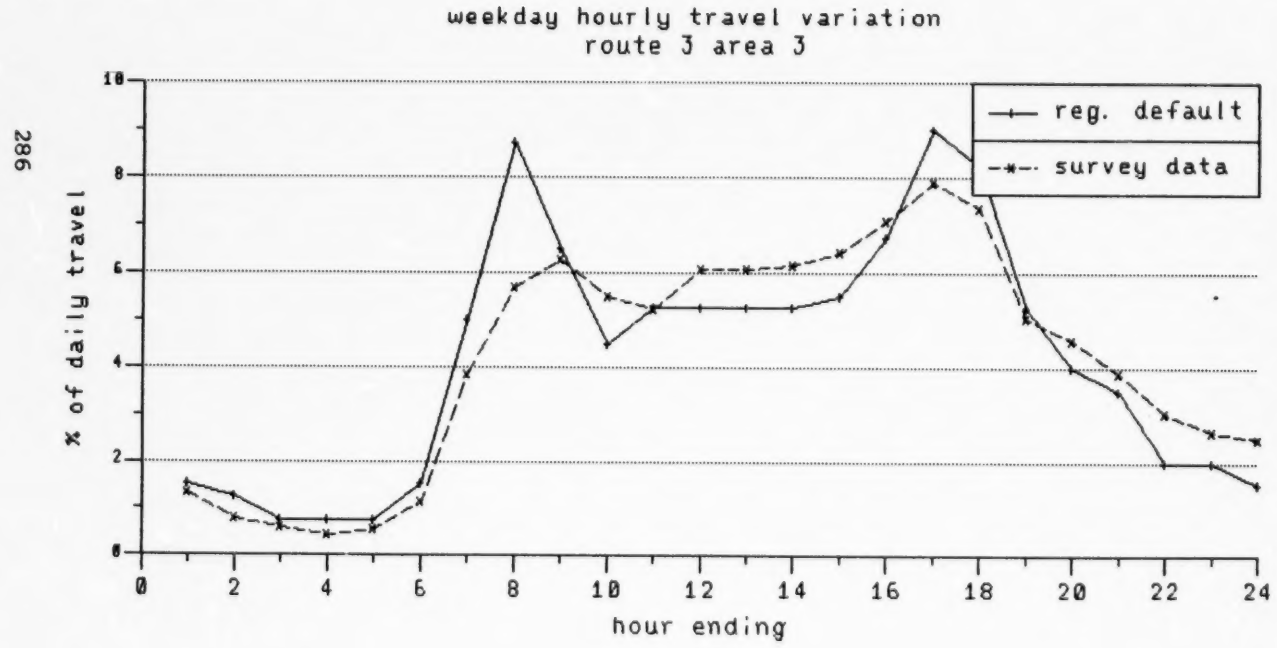
weekday hourly travel variation
route 3 area 3
reg. default
survey data
% of daily travel
hour ending
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FIGURE 7

weekday hourly travel variation
route 3 area 4
reg. default
survey data
% of daily travel
hour ending
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FIGURE 8

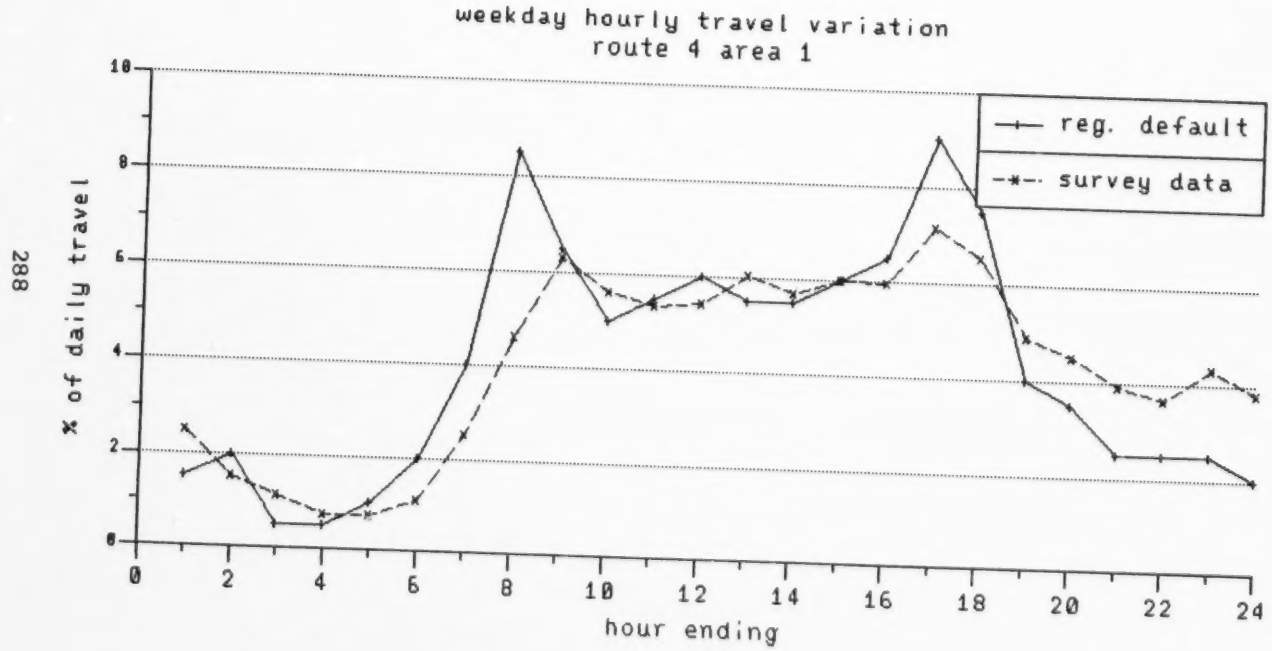
weekday hourly travel variation
route 4 area 1
reg. default
survey data
% of daily travel
hour ending
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FIGURE 9

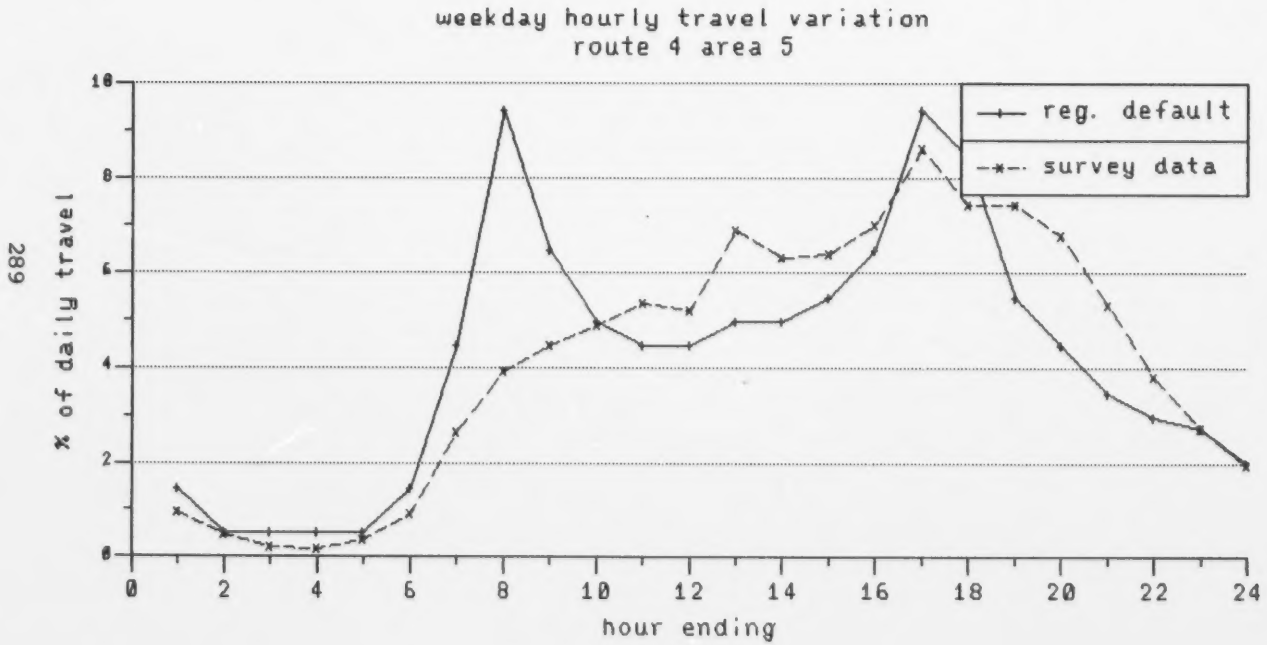
weekday hourly travel variation
route 4 area 5
reg. default
survey data
% of daily travel
hour ending
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FIGURE 10

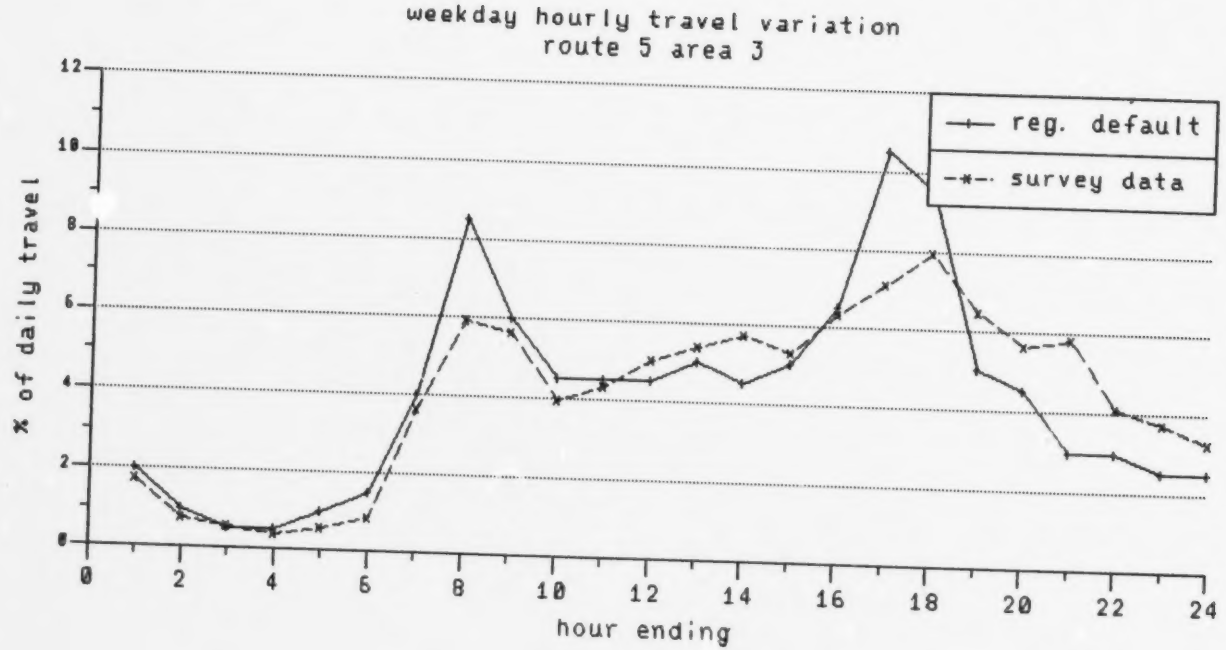
weekday hourly travel variation
route 5 area 3
reg. default
survey data
% of daily travel
hour ending
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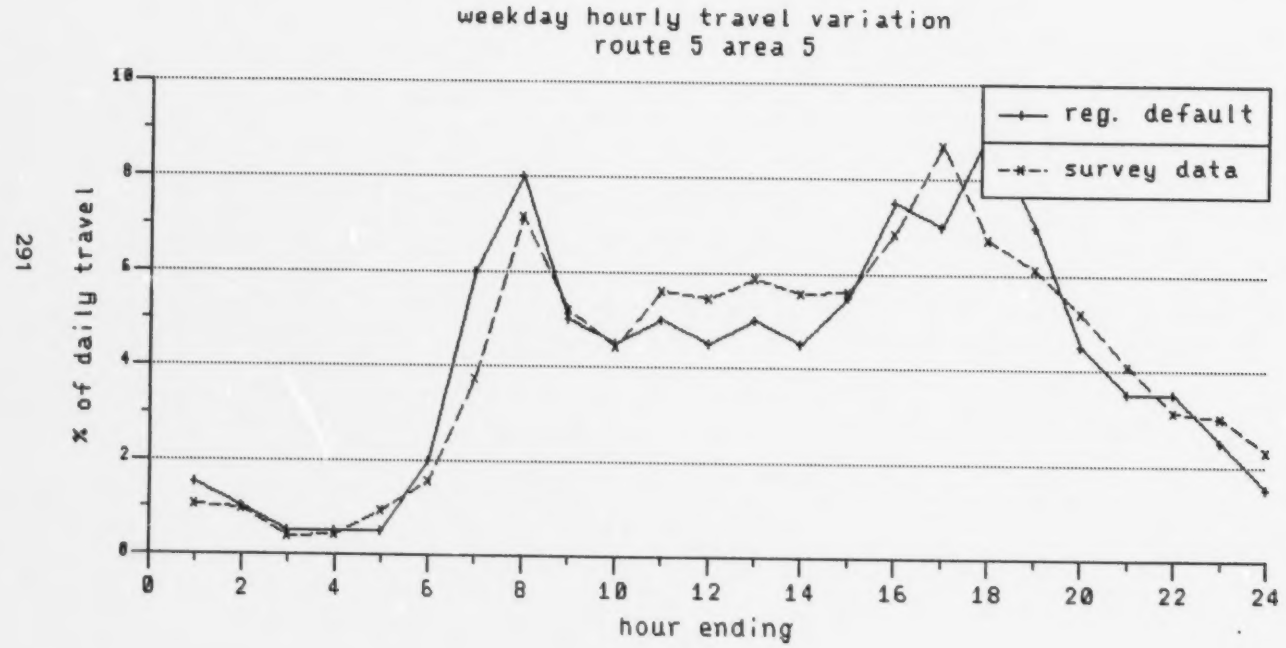
FIGURE 11


weekday hourly travel variation
route 5 area 5
reg. default
survey data
% of daily travel
hour ending
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DEFAULT VS. SURVEY HOURLY WEEKDAY TRAVEL VARIATIONS

route	area	difference
1 - freeway	1 - cbd	+/- 1% per hour
1 - freeway	3 - urban	+/- 1% per hour
1 - freeway	4 - suburban	greater peaking
1 - freeway	5 - rural	+/- 1% per hour
3 - arterial	3 - urban	greater A.M. peaking
3 - arterial	4 - suburban	+/- 1% per hour
4 - arterial	1 - cbd	greater peaking
4 - arterial	5 - rural	greater A.M. peaking
5 - collector	3 - urban	greater peaking
5 - collector	5 - rural	1 hour shift P.M. peak

Since the cited differences are not considered statistically representative of the region, it is recommended that the standard regional default parameters be applied for deriving the hourly weekday inventory.

IV. SINGLE UNIT HEAVY-TRUCKS

Because of the increase in both particulate and SO2 emissions resulting from diesel vehicles, the accuracy of the inventory is accutely dependent on proper allocation of gas and diesel heavy-duty vehicle travel. In order to derive a regional indication of this proportion, randomly selected manual classification counts collected during the spring of 1982 were processed to define the distribution of single versus trailer unit heavy-duty vehicles by route and area. It is intended that this data will then be further distributed into diesel and gas categories, based upon information to be provided by EPA.

Details concerning the statistically-based sampling data used in the analysis can be found in the report 'Monitoring Vehicle Occupancy, Vehicle Classification and Highway Travel Times', published by DVRPC. The sample classification data consisted of 108 links distributed amongst the route and area stratifications used for deriving emissions as follows:

Stratified Single Unit Heavy-Truck Sample

Area \	Freeway Expressway	Principal Arterial	Secondary	Collector	Total
CBD	5	6	6	8	25
Urban	3	3	5	9	20
Subur	4	4	8	12	28

Rural	6	9	7	13	35
Total	18	22	26	42	108

The individual link percentages for each of the sample locations are shown on attachement no. 1. Shown below is a summary of the results, indicating the proportion of single versus trailer heavy-duty trucks stratified by route and area.

Percent Single Unit/Trailer Heavy-Trucks

Area \	Freeway Expressway	Principal Arterial	Secondary	Collector
CBD	57/43	69/31	87/13	91/09
Urban	52/48	74/26	74/26	85/15
Suburban	39/61	64/36	66/34	81/19
Rural	31/69	45/55	66/44	73/27

As expected the sample indicates a very pronounced pattern in which the single unit percentage increases relative to a decline in highway class(freeway-collector), and decreases relative to a reduction in land use density(cbd-rural).

In order to provide a guide for applying the single/trailer distributions for defining gas and diesel heavy-truck proportions, the figures above were multiplied by the percent of regional vmt produced within each cell. For this calculation the trailer distribution on non-network local facilities (which were not sampled) was assumed at one-half that recorded on collectors. The percent heavy-truck vmt resulting from this calculation is presented below and compared to the percentage of gas and diesel heavy-truck vmt derived in the recently completed regional inventory developed for the 1982 SIP.

For the SIP inventory, heavy truck VMT was propotioned between gas and diesel based upon the 35 versus 65 percent split respectively in VMT recorded for trucks registered in Pennsylvania and New Jersey in the "1977 Census of Transportation Truck Inventory and Use Survey". Since information was not available concerning travel by route and area these proportions were applied uniformly.

Percent Regional VMT by Route and Area

9.2/3.5 - Single/Trailer
6.8/4.1 - Gas / Diesel

Area \	Freeway Expressway	Principal Arterial	Secondary	Collector	Local Centroid	Total
CBD	.057/ .043	.062/ .028	.070/ .010	.000/ .000	.024/ .001	.213/ .083
	.035/ .065	.034/ .058	.028/ .052	.000/ .000	.009/ .016	.106/ .191
Urban	.156/ .144	.666/ .234	.237/ .083	.042/ .008	.023/ .002	1.125/ .470
	.105/ .195	.322/ .580	.112/ .208	.018/ .032	.009/ .016	.566/1.031
Subur	.515/ .805	1.152/ .648	.475/ .245	.113/ .027	.109/ .011	2.365/1.735
	.456/ .864	.632/1.170	.256/ .464	.046/ .086	.040/ .080	1.430/2.664
Rural	.298/ .662	.495/ .605	.396/ .204	.051/ .019	.244/ .036	1.483/1.527
	.336/ .624	.382/ .720	.210/ .390	.024/ .046	.096/ .184	1.048/1.964
TOTAL	1.025/1.655	2.375/1.515	1.178/ .542	.207/ .053	.400/ .050	5.185/3.815
	.932/1.748	1.470/2.528	.606/1.114	.088/ .164	.154/ .296	3.150/5.850

The table above illustrates a converse from what may have been anticipated in that the percent single VMt produced regionaly approximately equals that assigned to diesel for the SIP, while trailer VMT approximates gas. Therefore assuming single - gas and trailer - diesel synonymous as proposed would result in a distribution of 65 percent gas and 35 persent diesel or a complete reversal of the assumptions used in the 1982 SIP.

V. SILT LOADING ROADWAY CLASSIFICATIONS

The final subject of the memorandum discusses the relationship between the route type classifications used by DVRPC and those suggested by Engineeering-Science for applying silt emission factors. The reference provided by Enginnering-Science suggests the following classification strata for deriving silt emissions:

Suggested Paved Roadway Classifications

Roadway Type	Daily Traffic	# Lanes
Freeway/Expressways	10,000 or more	4 or more
Major St/Highways	10,000 or more	4 or more
Collector Streets	500-10,000	2
Local Streets	0- 500	2

In order to properly align DVRPC's route type classifications with those suggested for the silt inventory, the average daily travel and lanes by route type were extracted from the 1977 DVRPC calibration study. The table below summarizes these figures and the recommended

correspondence for applying the silt emission factors.

Average Volumes and Lanes By Route

Roadway Type		Daily Traffic	# Lanes	Silt Type
Freeway	(1)	57,000	8	Freeway/Expressway
Expressway	(2)	29,000	8	Freeway/Expressway
Principal	(3)	28,000	7	Major St./Highways
Secondary	(4)	9,000	4	Major ST./Highways
Collector	(5)	4,000	4	Collector Streets
Local	(6)	1,000	4	Collector Streets
Centroid	(7)	na	na	Local Streets
Ramp	(8)	na	na	Freeway/Expressway

As shown the correspondence is based upon the volume and lane stratifiers rather than the generic classificatios of type, because of the higher travel densities and number of lanes recorded in the DVRPC classifications versus their recommended counterparts for modelling silt.

DATE 04/07/83 Attachment 1 % SINGLE UNIT HEAVY TRUCKS BY ROUTE & AREA PAGE 1

AREA	ROUTE	LINK ID	TOTAL HEAVY TRUCKS	SINGLE UNIT	TRAILER	% SINGLE
1	1	06310084045061	103	77	26	75
1	1	06220081067064	145	73	72	50
1	1	09310080057056	239	153	86	64
1	1	09310113066088	232	146	86	63
1	1	09340125084083	724	397	327	55
1	1	09430057047044	91	69	22	76
1	1	16080019046014	105	26	79	25
1	ROUTE TOTAL		1,639	941	698	57
1	2	09310101071068	155	95	60	61
1	2	09320036099104	68	31	37	46
1	2	09320041053058	76	39	37	51
1	2	09340045032033	38	37	1	97
1	2	09340138117025	49	45	4	92
1	2	09340158097070	65	65	0	100
1	ROUTE TOTAL		451	312	139	69
1	3	09320070092095	44	42	2	95
1	3	09320110037032	104	86	18	83
1	3	09320110037092	49	44	5	90
1	3	09320114106051	96	89	7	93
1	3	09320168107108	92	89	3	97
1	3	09340010011008	78	76	2	97
1	3	09460043019018	83	51	32	61
1	ROUTE TOTAL		546	477	69	87
1	4	09310128083082	116	110	6	95
1	4	09310179100103	76	72	4	95
1	4	09320069065037	171	148	23	87
1	4	09330007007006	96	94	2	98
1	4	09330063053057	24	22	2	92
1	4	09330248109122	63	57	6	90
1	4	09330252093084	52	42	10	81
1	4	09340089059040	54	49	5	91
1	ROUTE TOTAL		652	594	58	91
AREA TOTAL			3,288	2,324	964	71
2	1	07740099064063	535	215	320	40
2	1	16060092050049	588	350	238	60
2	1	16080023020016	524	288	236	55
2	ROUTE TOTAL		1,647	853	794	52
2	2	07810030024025	169	110	59	65
2	2	09210126088072	78	69	9	88
2	2	09430057047044	26	22	4	85
2	ROUTE TOTAL		273	201	72	74
2	3	07720059028029	121	101	20	83

DATE 04/07/83

% SINGLE UNIT HEAVY TRUCKS BY ROUTE & AREA

AREA	ROUTE	LINK ID	TOTAL HEAVY TRUCKS	SINGLE UNIT	TRAILER	% SINGLE
2	3	0943001402700 5	130	107	23	82
2	3	1091002203902 0	63	41	22	65
2	3	1601006204402 6	14	13	1	93
2	3	1607012807307 2	145	90	55	62
2	ROUTE TOTAL		473	352	121	74
2	4	0451000500400 5	0	0	0	0
2	4	0580009109507 5	50	31	19	62
2	4	0622016109903 7	11	9	2	82
2	4	0662016109903 7	10	9	1	90
2	4	0763000800900 8	121	94	27	78
2	4	0753001301201 3	35	35	0	100
2	4	0764004609702 2	63	61	2	97
2	4	0772011908106 5	40	31	9	78
2	4	0922005905105 0	4	4	0	100
2	4	1602007504004 3	67	65	2	97
2	ROUTE TOTAL		401	339	62	85
AREA TOTAL			2,794	1,745	1,049	62
3	1	0740012107301 3	624	293	331	47
3	1	0792011507407 9	341	84	257	25
3	1	0900002906005 9	323	133	190	41
3	1	1081007506902 6	392	143	249	36
3	ROUTE TOTAL		1,680	653	1,027	39
3	2	0240003302302 4	71	39	32	55
3	2	0630015410307 0	427	292	135	68
3	2	0751005303405 7	66	46	20	70
3	2	0792010101106 9	101	46	55	46
3	ROUTE TOTAL		665	423	242	64
3	3	0610003508900 3	335	143	192	43
3	3	0752002701901 8	91	65	26	71
3	3	0945005904004 1	41	40	1	98
3	3	0950001501501 7	22	22	0	100
3	3	1081009306506 7	58	51	7	88
3	3	1081009400806 5	55	42	13	76
3	3	1130002306301 5	45	44	1	98
3	3	1120004503200 3	67	65	2	97
3	ROUTE TOTAL		714	472	242	66
3	4	0240007404704 8	63	56	7	89
3	4	0610009506906 8	34	30	4	88
3	4	0740013709910 0	3	3	0	100
3	4	0752005208507 4	51	42	9	82
3	4	0762009506808 1	32	20	12	63
3	4	0921005500406 5	3	3	0	100
3	4	0922004603503 4	22	22	0	100

DATE 04/07/83

% SINGLE UNIT HEAVY TRUCKS
BY ROUTE & AREA

AREA	ROUTE	LINK ID	TOTAL HEAVY TRUCKS	SINGLE UNIT	TRAILER	% SINGLE
3	4	095003040520 54	15	13	2	87
3	4	095000210220 23	26	22	4	85
3	4	095000710720 50	112	68	44	61
3	4	105000340130 52	92	85	7	92
3	4	108100560390 22	5	5	0	100
3	ROUTE TOTAL		458	369	89	81
AREA TOTAL			3,517	1,917	1,600	55
4	1	023000530140 38	217	91	126	42
4	1	038000050020 06	168	24	144	14
4	1	046000140890 10	159	72	87	45
4	1	064000340310 15	814	181	633	22
4	1	072000450420 39	223	123	100	55
4	1	072000820160 25	402	100	302	25
4	1	090000420020 35	120	70	50	58
4	1	109200320220 24	310	74	236	24
4	1	150000090060 08	28	12	16	43
4	ROUTE TOTAL		2,441	747	1,694	31
4	2	024000600280 43	99	13	86	13
4	2	025000530420 43	121	82	39	68
4	2	042000670790 80	27	16	11	59
4	2	046000140890 10	117	48	69	41
4	2	046000500020 29	172	122	50	71
4	2	057000020200 60	231	124	107	54
4	2	061001150920 99	32	31	1	97
4	2	064000090060 09	184	82	102	45
4	2	105000070160 11	299	61	238	20
4	ROUTE TOTAL		1,282	579	703	45
4	3	045200060060 05	16	15	1	94
4	3	054000060070 06	89	65	24	73
4	3	088000160160 17	37	25	12	68
4	3	096000900640 23	225	124	101	55
4	3	104000070170 09	2	2	0	100
4	3	113003500310 36	57	43	14	75
4	3	150000140130 12	72	55	17	76
4	ROUTE TOTAL		498	329	169	66
4	4	002000050060 04	8	5	3	63
4	4	002000160140 16	22	17	5	77
4	4	013000080060 03	4	2	2	50
4	4	023000180180 16	4	4	0	100
4	4	042000430330 31	2	2	0	100
4	4	042000940680 69	92	87	5	95
4	4	044100420330 34	12	11	1	92
4	4	047000480300 39	12	11	1	92
4	4	055001040700 75	3	3	0	100

DATE 04/07/83

% SINGLE UNIT HEAVY TRUCKS
BY ROUTE & AREA

AREA	ROUTE	LINK ID	TOTAL HEAVY TRUCKS	SINGLE UNIT	TRAILER	% SINGLE
4	4	079200240140 15	12	12	0	100
4	4	106000480320 31	2	2	0	100
4	4	111000710470 84	111	77	34	69
4	4	128000290410 14	138	74	64	54
4	ROUTE TOTAL		422	307	115	73
AREA TOTAL			4,643	1,962	2,681	42
GRAND TOTAL			14,242	7,948	6,294	56

APPENDIX D

NEDS COUNTY AREA SOURCE INPUT FORMS

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ____________________

State (1–2)	County (3–6)	AQCR (7–9)
39	1200	045

Card 1

Field	Columns	Entry
Year of Record	10–11	82
EMISSION ESTIMATES (10^2 tons): Particulate	12–16	
SO_2	17–21	
NO_x	22–25	
HC	26–30	
CO	31–35	
SULFUR CONTENT (%): Anth. Coal	36–37	07
Bitum. Coal	38–39	30
Dist. Oil	40–41	03
Resid Oil	42–43	10
ASH CONTENT (%): Anth. Coal	44–46	126
Bitum. Coal	47–49	112
RESIDENTIAL FUEL: Anth. 10^2 tons	50–53	73
Bitumin. 10^1 tons	54–58	
Dist. Oil 10^4 Gal.	59–63	9955
Resid. Oil 10^4 Gal.	64–68	
Nat. Gas 10^7 ft.^{3}	69–73	593
Wood 10^2 tons	74–77	9
Action	78	A
	79	A
cd	80	1

Card 2

Field	Columns	Entry
COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons	10–14	
Bitumin. 10^1 tons	15–19	
Dist. Oil 10^4 Gals.	20–24	1520
Resid. Oil 10^4 Gals.	25–29	2300
Nat. Gas 10^7 Ft^3	30–33	272
Wood 10^2 tons	34–35	
INDUSTRIAL FUEL: Anth. Coal 10^1 tons	36–41	
Bitum. Coal 10^1 tons	42–47	
Coke 10^1 tons	48–51	
Dist. Oil 10^4 Gals.	52–56	579
Resid. Oil 10^4 Gals.	57–61	2230
Nat. Gas 10^7 Ft.^{3}	62–66	173
OFF-HIGHWAY DIESEL: Farm 10^3 Gals.	67–69	98
Constr. 10^4 Gals.	70–73	64
	74–77	
Action	78	A
	79	A
cd	80	2

Card 3

Field	Columns	Entry
ON SITE INCINERATION: Residential 10^1 tons	10–15	
Industrial 10^2 tons	16–20	
Comm. Inst. 10^2 tons	21–24	
OPEN BURNING: Residential 10^2 tons	25–30	
Industrial 10^2 tons	31–36	
Comm'l-Instit. 10^2 tons	37–42	
	43–59	
OFF-HIGHWAY DIESEL: Industrial Equipment 10^3 Gals.	60–64	2714
	65–67	
Railroad 10^4 Gals.	68–72	600
County Population 10^3	73–76	484
Density Code	77	
Action	78	A
	79	A
cd	80	3

Card 4

Field	Columns	Entry
AIRCRAFT: Military LTO CYC 10^1	10–13	36
Civil LTO CYC 10^1	14–18	21008
Commercial LTO CYC 10^1	19–23	475
VESSELS: Anth. Coal 10^1 tons	24–27	
Diesel Oil 10^4 Gals.	28–31	4
Resid. Oil 10^4 Gals.	32–36	44
Gasoline 10^3 Gals.	37–40	776
Construction Activity Acres	41–46	1512
Agricult. Tilling Tilling-Acres	47–51	36300
OFF-HIGHWAY GASOLINE: Indus. Eqpt. 10^3 Gals.	52–57	991
Farm 10^3 Gals.	58–63	843
Constr. 10^3 Gals.	64–69	48
Sm. Eng. 10^3 Gals.	70–76	1604
	77	
Action	78	A
	79	A
cd	80	4

Card 5

Field	Columns	Entry
Unpaved Roads 10^3 VMT	10–16	2032
Unpaved Airstrips LTOs	17–21	77541
	22–31	
FOREST FIRES: Area - Acres	32–38	1
Quant. ton/acre	39–41	11
AGRICULT. + MISC. BURNING: Area - Acres	42–47	496
Quant. tons/acre	48–50	1
FROST CONTROL: Orchard Heaters 10^2	51–54	
Days Fired days/yr	55–57	
Structure Fires #/year	58–61	1023
PRESCRIBED BURNING: Area-Acres	62–67	7
Quant. tons/acre	68–70	70
	71–77	
Action	78	A
	79	A
cd	80	5

Card 6

Field	Columns	Entry
COMMENTS	10–77	BUCKS COUNTY 1982
Action	78	A
	79	A
cd	80	6

EPA (DUR) 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________

State (1–2)	County (3–6)	AQCR (7–9)
39	1660	045

Card 1

Year of Record (10–11)	Emission Estimates (10^2 tons): Particulate (12–16)	SO_2 (17–21)	NO_x (22–25)	HC (26–30)	CO (31–35)	Sulfur Content (%): Anth. Coal (36–37)	Bitum. Coal (38–39)	Dist. Oil (40–41)	Resid. Oil (42–43)	Ash Content (%): Anth. Coal (44–46)	Bitum. Coal (47–49)	Anth. 10^2 tons (50–53)	Bitum. 10^1 tons (54–57)	Residential Fuel: Dist. Oil 10^4 Gal. (58–63)	Resid. Oil 10^4 Gal. (64–68)	Nat. Gas 10^7 ft.^{3} (69–73)	Wood 10^2 tons (74–77)	Action (78)	(79)	cd (80)
82						0.7	3.0	0.3	1.0	12.6	11.2	99		7308		386	6	A	A	1

Card 2

Commercial and Institutional Fuel: Anth. 10^1 tons (10–14)	Bitumin. 10^1 tons (15–19)	Dist. Oil 10^4 Gals. (20–24)	Resid. Oil 10^4 Gals. (25–29)	Nat. Gas 10^7 Ft^3 (30–33)	Wood 10^2 tons (34–35)	Industrial Fuel: Anth. Coal 10^1 tons (36–41)	Bitum. Coal 10^1 tons (42–47)	Coke 10^1 tons (48–51)	Dist. Oil 10^4 Gals. (52–56)	Resid. Oil 10^4 Gals. (57–61)	Nat. Gas 10^7 Ft.^{3} (62–66)	Off-Highway Diesel: Farm 10^3 Gals. (67–69)	Constr. 10^4 Gals. (70–73)	(74–77)	Action (78)	(79)	cd (80)
		906	1594	161					363	1716	286	207	48		A	A	2

Card 3

On Site Incineration: Residential 10^1 tons (10–15)	Industrial 10^2 tons (16–20)	Comm. Inst. 10^2 tons (21–24)	Open Burning: Residential 10^2 tons (25–30)	Industrial 10^2 tons (31–36)	Comm'l-Instit. 10^2 tons (37–42)	(43–59)	Off-Highway Diesel: Industrial Equipment 10^3 Gals. (60–64)	Railroad 10^4 Gals. (65–72)	County Population 10^3 (73–76)	Density Code (77)	Action (78)	(79)	cd (80)
							1989	400	305		A	A	3

Card 4

Aircraft: Military LTO CYC 10^1 (10–13)	Civil LTO CYC 10^1 (14–18)	Commercial LTO CYC 10^1 (19–23)	Vessels: Anth. Coal 10^1 tons (24–27)	Diesel Oil 10^4 Gals. (28–31)	Resid. Oil 10^4 Gals. (32–36)	Gasoline 10^3 Gals. (37–40)	Construction Activity Acres (41–46)	Agricult. Tilling Tilling-Acres (47–51)	Off-Highway Gasoline: Indus. Eqpt. 10^3 Gals. (52–57)	Farm 10^3 Gals. (58–63)	Constr. 10^3 Gals. (64–69)	Sm. Eng. 10^3 Gals. (70–77)	Action (78)	(79)	cd (80)
10	8005	263				247	928	60800	727	1768	36	917	A	A	4

Card 5

Unpaved Roads 10^3 VMT (10–16)	Unpaved Airstrips LTOs (17–21)	(22–31)	Forest Fires: Area - Acres (32–38)	Quant. ton/acre (39–41)	Agricult. Burning: Area - Acres (42–47)	Quant. tons/acre (48–50)	Frost Control: Orchard Heaters 10^2 (51–54)	Days Fired days/yr (55–57)	Structure Fires #/year (58–61)	Prescribed Burning: Area-Acres (62–67)	Quant. tons/acre (68–70)	(71–77)	Action (78)	(79)	cd (80)
1498	28768		32	11	651	1			3518	10	70		A	A	5

Card 6

COMMENTS (10–77)	Action (78)	(79)	cd (80)
CHESTER COUNTY 1982	A	A	6

EPA (DURI 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date _____

Name of Person
Completing Form _____

State	County	AQCR
39	23	045

EMISSION ESTIMATES (10^2 tons): Particulate; SO_2; NO_x; HC; CO

SULFUR CONTENT (%): Anth. Coal; Bitum. Coal; Dist. Oil; Resid. Oil

ASH CONTENT (%): Anth. Coal; Bitum. Coal

Anth. 10^2 tons; Bitumin. 10^1 tons

RESIDENTIAL FUEL: Dist. Oil 10^4 Gal.; Resid. Oil 10^4 Gal.; Nat. Gas 10^7 $ft.^3$; Wood 10^2 tons

Year of Record	Particulate	SO_2	NO_x	HC	CO	Anth. Coal	Bitum. Coal	Dist. Oil	Resid. Oil	Anth. Coal	Bitum. Coal	Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 $ft.^3$	Wood 10^2 tons	Action	cd
82						0.7	3.0	0.3	1.0	1.2	1.1		8.6				1.1	A	1
											2.6						1.8		
											1.2						3.7		
																	2.7		
																	5		

COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons; Bitumin. 10^1 tons; Dist. Oil 10^4 Gals.; Resid. Oil 10^4 Gals.; Nat. Gas 10^7 Ft^3; Wood 10^2 tons

INDUSTRIAL FUEL: Anth. Coal 10^1 tons; Bitum. Coal 10^1 tons; Coke 10^1 tons; Dist. Oil 10^4 Gals.; Resid. Oil 10^4 Gals.; Nat. Gas 10^7 Ft^3

OFF-HIGHWAY DIESEL: Farm 10^3 Gals.; Constr. 10^4 Gals.

Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Farm 10^3 Gals.	Constr. 10^4 Gals.	Action	cd
		2.2	1.4						5.9	9.2		7.1	9.3	A	2
		3.1	9.4							2.3					
				4.0	0.0					5.3					
											4.3				
											5.5				

ON SITE INCINERATION: Residential 10^1 tons; Industrial 10^2 tons; Comm. Inst. 10^2 tons

OPEN BURNING: Residential 10^2 tons; Industrial 10^2 tons; Comm'l - Instill. 10^2 tons

OFF-HIGHWAY DIESEL: Industrial Equipment 10^3 Gals.; Railroad 10^4 Gals.

County Population 10^3; Density Code

Residential 10^1 tons	Industrial 10^2 tons	Comm. Inst. 10^2 tons	Residential 10^2 tons	Industrial 10^2 tons	Comm'l - Instill. 10^2 tons	Industrial Equipment 10^3 Gals.	Railroad 10^4 Gals.	County Population 10^3	Density Code	Action	cd
						2.0	8.1	6.2	1	A	3
						8.5					

OFF-HIGHWAY GASOLINE: Indus. Eqpt. 10^3 Gals.; Farm 10^3 Gals.; Constr. 10^3 Gals.; Sm. Eng. 10^3 Gals.

AIRCRAFT: Military LTO CYC 10^1; Civil LTO CYC 10^1; Commercial LTO CYC 10^1

VESSELS: Anth. Coal 10^1 tons; Diesel Oil 10^4 Gals.; Resid. Oil 10^4 Gals.; Gasoline 10^3 Gals.

Construction Activity Acres; Agricult. Tilling Tilling-Acres

Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	Construction Activity Acres	Agricult. Tilling Tilling-Acres	Indus. Eqpt. 10^3 Gals.	Farm 10^3 Gals.	Constr. 10^3 Gals.	Sm. Eng. 10^3 Gals.	Action	cd
14	10	30	43	49	46.7	46.7	21.5	30.0	7.6	6.2	6.2	1.4.5	A	4
												1.9.7.1		

Unpaved Roads 10^3 VMT; Unpaved Airstrips LTOs

FOREST FIRES: Area - Acres; Quant. ton/acre

AGRICULT. + MISC. BURNING: Area - Acres; Quant. tons/acre

FROST CONTROL: Orchard Heaters 10^2; Days Fired days/yr

Structure Fires #/year

PRESCRIBED BURNING: Area-Acres; Quant. tons/acre

Unpaved Roads 10^3 VMT	Unpaved Airstrips LTOs	Area - Acres	Quant. ton/acre	Area - Acres	Quant. tons/acre	Orchard Heaters 10^2	Days Fired days/yr	Structure Fires #/year	Area-Acres	Quant. tons/acre	Action	cd
109		1.1	1.1	6.0	1			297.4		70	A	5

COMMENTS

COMMENTS	Action	cd
DELAWARE COUNTY 1982	A	6

EPA (OURI 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________________

State (1–2)	County (3–6)	AQCR (7–9)
39	6000	045

Card 1

Field	Columns	Entry
Year of Record	10–11	82
EMISSION ESTIMATES (10^2 tons): Particulate	12–16	
SO$_2$	17–21	
NO$_x$	22–25	
HC	26–30	
CO	31–35	
SULFUR CONTENT (%): Anth. Coal	36–37	0.7
Bitum. Coal	38–39	3.0
Dist. Oil	40–41	0.3
Resid. Oil	42–43	1.0
ASH CONTENT (%): Anth. Coal	44–46	12.6
Bitum. Coal	47–49	11.2
RESIDENTIAL FUEL: Anth. 10^2 tons	50–53	197
Bitumin. 10^1 tons	54–58	
Dist. Oil 10^4 Gal.	59–63	14288
Resid. Oil 10^4 Gal.	64–68	
Nat. Gas 10^7 ft.^{3}	69–73	856
Wood 10^2 tons	74–76	
Action	78	[illegible]
cd	80	1

Card 2

Field	Columns	Entry
COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons	10–14	1121
Bitumin. 10^1 tons	15–19	131
Dist. Oil 10^4 Gals.	20–24	3791
Resid. Oil 10^4 Gals.	25–29	4399
Nat. Gas 10^7 Ft^3	30–33	637
Wood 10^2 tons	34–35	
INDUSTRIAL FUEL: Anth. Coal 10^1 tons	36–41	
Bitum. Coal 10^1 tons	42–47	3790
Coke 10^1 tons	48–51	
Dist. Oil 10^4 Gals.	52–56	
Resid. Oil 10^4 Gals.	57–61	4762
Nat. Gas 10^7 Ft.^{3}	62–66	835
OFF-HIGHWAY DIESEL: Farm 10^3 Gals.	67–69	61
Constr. 10^4 Gals.	70–73	386
	74–77	
Action	78	A
	79	A
cd	80	2

Card 3

Field	Columns	Entry
ON SITE INCINERATION: Residential 10^1 tons	10–15	
Industrial 10^2 tons	16–20	
Comm. Inst. 10^2 tons	21–24	
OPEN BURNING: Residential 10^2 tons	25–30	
Industrial 10^2 tons	31–36	
Comm'l - Instit'l. 10^2 tons	37–42	
	43–59	
OFF-HIGHWAY DIESEL: Industrial Equipment 10^3 Gals.	60–64	5445
	65–67	
Railroad 10^4 Gals.	68–72	768
County Population 10^3	73–76	690
Density Code	77	
Action	78	A
	79	A
cd	80	3

Card 4

Field	Columns	Entry
AIRCRAFT: Military LTO CYC 10^1	10–13	55
Civil LTO CYC 10^1	14–18	18947
Commercial LTO CYC 10^1	19–23	1481
VESSELS: Anth. Coal 10^1 tons	24–27	
Diesel Oil 10^4 Gals.	28–31	
Resid. Oil 10^4 Gals.	32–36	
Gasoline 10^3 Gals.	37–40	615
Construction Activity Acres	41–46	5440
Agricult. Tilling Tilling-Acres	47–51	20300
OFF-HIGHWAY GASOLINE: Indus. Eqpt. 10^3 Gals.	52–57	1989
Farm 10^3 Gals.	58–63	522
Constr. 10^3 Gals.	64–69	290
Sm. Eng. 10^3 Gals.	70–76	1981
Action	78	A
	79	A
cd	80	4

Card 5

Field	Columns	Entry
Unpaved Roads 10^3 VMT	10–16	901
Unpaved Airstrips LTOs	17–21	51142
	22–31	
FOREST FIRES: Area - Acres	32–38	11
Quant. ton/acre	39–41	11
AGRICULT. + MISC. BURNING: Area - Acres	42–47	268
Quant. tons/acre	48–50	1
FROST CONTROL: Orchard Heaters 10^2	51–54	
Days Fired days/yr	55–57	
Structure Fires #/year	58–61	3940
PRESCRIBED BURNING: Area-Acres	62–67	2
Quant. tons/acre	68–70	70
	71–77	
Action	78	A
	79	A
cd	80	5

Card 6

Field	Columns	Entry
COMMENTS	10–77	MONTGOMERY COUNTY 1982
Action	78	A
	79	A
cd	80	6

EPA (DUR) 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ______

Name of Person Completing Form ______

State (1–2)	County (3–6)	AQCR (7–9)
39	7160	045

Card 1

Year of Record (10–11)	EMISSION ESTIMATES (10^2 tons): Particulate (12–16)	SO_2 (17–21)	NO_x (22–25)	HC (26–30)	CO (31–35)	SULFUR CONTENT (%): Anth. Coal (36–37)	Bitum. Coal (38–39)	Dist. Oil (40–41)	Resid Oil (42–43)	ASH CONTENT (%): Anth. Coal (44–46)	Bitum. Coal (47–49)	RESIDENTIAL FUEL: Anth. 10^2 tons (50–53)	Bitumin. 10^1 tons (54–58)	Dist. Oil 10^4 Gal. (59–63)	Resid. Oil 10^4 Gal. (64–68)	Nat. Gas 10^7 ft.^{3} (69–73)	Wood 10^2 tons (74–77)	Action (78)	(79)	cd (80)
82						0.6	2.1	0.2	0.5	13.1	10.4	1100		220B2		4049		A	A	1

Card 2

COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons (10–14)	Bitumin. 10^1 tons (15–19)	Dist. Oil 10^4 Gals. (20–24)	Resid. Oil 10^4 Gals. (25–29)	Nat. Gas 10^7 Ft^3 (30–33)	Wood 10^2 tons (34–35)	INDUSTRIAL FUEL: Anth. Coal 10^1 tons (36–41)	Bitum. Coal 10^1 tons (42–47)	Coke 10^1 tons (48–51)	Dist. Oil 10^4 Gals. (52–56)	Resid. Oil 10^4 Gals. (57–61)	Nat. Gas 10^7 Ft.^{3} (62–66)	OFF-HIGHWAY DIESEL: Farm 10^3 Gals. (67–69)	Constr. 10^4 Gals. (70–73)	(74–77)	Action (78)	(79)	cd (80)
		1970	6340	30									804		A	A	2

Card 3

ON SITE INCINERATION: Residential 10^1 tons (10–15)	Industrial 10^2 tons (16–20)	Comm. Inst. 10^2 tons (21–24)	OPEN BURNING: Residential 10^2 tons (25–30)	Industrial 10^2 tons (31–36)	Comm'l-Instit. 10^2 tons (37–42)	(43–59)	OFF-HIGHWAY DIESEL: Industrial Equipment 10^3 Gals. (60–64)	(65–67)	Railroad 10^4 Gals. (68–72)	County Population 10^3 (73–76)	Density Code (77)	Action (78)	(79)	cd (80)
							9113		2360	1942		A	A	3

Card 4

AIRCRAFT: Military LTO CYC 10^1 (10–13)	Civil LTO CYC 10^1 (14–18)	Commercial LTO CYC 10^1 (19–23)	VESSELS: Anth. Coal 10^1 tons (24–27)	Diesel Oil 10^4 Gals. (28–31)	Resid. Oil 10^4 Gals. (32–36)	Gasoline 10^3 Gals. (37–40)	Construction Activity Acres (41–46)	Agricult. Tilling Tilling-Acres (47–51)	OFF-HIGHWAY GASOLINE: Indus. Eqpt. 10^3 Gals. (52–57)	Farm 10^3 Gals. (58–63)	Constr. 10^3 Gals. (64–69)	Sm. Eng. 10^3 Gals. (70–76)	(77)	Action (78)	(79)	cd (80)
492	14461	9326		120	1186	437	5916		3329		605	4115		A	A	4

Card 5

Unpaved Roads 10^3 VMT (10–16)	Unpaved Airstrips LTOs (17–21)	(22–31)	FOREST FIRES: Area - Acres (32–38)	Quant. ton/acre (39–41)	AGRICULT. + MISC. BURNING: Area - Acres (42–47)	Quant. tons/acre (48–50)	FROST CONTROL: Orchard Heaters 10^2 (51–54)	Days Fired days/yr (55–57)	Structure Fires #/year (58–61)	PRESCRIBED BURNING: Area-Acres (62–67)	Quant. tons/acre (68–70)	(71–77)	Action (78)	(79)	cd (80)
47									7356				A	A	5

Card 6

COMMENTS (10–77)	Action (78)	(79)	cd (80)
PHILADELPHIA COUNTY 1982	A	A	6

EPA (DUR) 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date _____

Name of Person Completing Form _____

State		County			AQCR		
1	2	3	4	5	6	7	8	9
3	1	0	6	6	0	0	4	5

Year of Record	EMISSION ESTIMATES (10^2 tons)					SULFUR CONTENT (%)				ASH CONTENT (%)				RESIDENTIAL FUEL							
	Particulate	SO_2	NO_x	HC	CO	Anth. Coal	Bitum. Coal	Dist. Oil	Resid Oil	Anth. Coal	Bitum. Coal	Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft^3	Wood 10^2 tons	Action		cd
10 11	12 13 14 15 16	17 18 19 20 21	22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39	40 41	42 43	44 45 46	47 48 49	50 51 52	53 54 55 56 57	58 59 60 61 62	63 64 65 66 67	68 69 70 71 72	73 74 75 76 77	78	79	80
8 2						0 6	0 7	0 2	0 3	0 3	7		1 2 1			5 2 5 8			6 8 8	7	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL							INDUSTRIAL FUEL							OFF-HIGHWAY DIESEL				
Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2tons	Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Farm 10^3 Gals.	Constr. 10^4 Gals.			Action		cd
10 11 12 13 14	15 16 17 18 19	20 21 22 23 24	25 26 27 28 29	30 31 32 33	34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50	51 52 53 54 55	56 57 58 59 60	61 62 63 64 65	66 67 68 69	70 71 72 73	74 75 76 77		78	79	80
		2 4 4 3	1 8 5 5		2 0 7							3 8	4 8			A	A	2

ON SITE INCINERATION			OPEN BURNING				OFF-HIGHWAY DIESEL											
Residential 10^1 tons	Industrial 10^2 tons	Comm. Inst. 10^2 tons	Residential 10^2 tons	Industrial 10^2 tons	Comm'l - Instill. 10^2 tons		Industrial Equipment 10^3 Gals.			Railroad 10^4 Gals.		County Population 10^3	Dens'y Cat.	Action		cd
10 11 12 13 14 15	16 17 18 19 20	21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39 40 41 42	43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	60 61	62 63 64	65 66 67	68 69	70 71 72	73 74 75 76	77	78	79	80
		2 6					1	2 4 2		1	2 5 6	3 7 2		A	A	3

AIRCRAFT			VESSELS						OFF-HIGHWAY GASOLINE									
Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	Construction Activity Acres	Agricult. Tilling Tilling-Acres	Indus. Eqpt. 10^3 Gals.	Farm 10^3 Gals.	Constr. 10^3 Gals.	Sm. Eng. 10^3 Gals.		Action		cd
10 11 12 13	14 15 16 17 18	19 20 21 22 23	24 25 26 27 28	29 30 31 32 33	34 35 36 37 38	39 40 41 42 43	44 45 46 47 48	49 50 51 52 53	54 55 56 57 58	59 60 61 62 63	64 65 66 67 68	69 70 71 72 73	74 75 76 77	78	79	80
4 1 8 7	1 4 9 1 2	6 7 1		3 1	3 0 5	3 2 5	2 2 1 8	2 9 5 0 0	4 5 3	5 6 5	3 6	1 1 7 9		A	A	4

Unpaved Roads 10^3 VMT	Unpaved Airstrips LTOs	FOREST FIRES			AGRICULT. + MISC. BURNING		FROST CONTROL			PRESCRIBED BURNING				
		Area - Acres	Quant. ton/acre		Area - Acres	Quant. tons/acre	Orchard Heaters 10^2	Days Fired days/yr	Structure Fires #/year	Area-Acres	Quant. tons/ acre		Action	cd
10 11 12 13 14 15 16	17 18 19 20 21	22 23 24 25 26 27 28 29 30 31	32 33 34 35 36 37 38	39 40 41	42 43 44 45 46 47 48	49 50 51	52 53 54 55 56 57	58 59 60 61	62 63 64 65 66 67	68 69 70 71 72 73 74 75 76 77	78	79	80
1 4 7 6			2 5 9 9	1 1	3 1 6	1	1	1 3 9 9	4 3 2	7 0		A	A	5

COMMENTS	Action		cd
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77	78	79	80
B U R L I N G T O N C O U N T Y 1 9 8 2	A	A	6

EPA (DURI) 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date _____

Name of Person Completing Form _____

State	County	AQCR
31	074	045

Year of Record	Particulate	SO_2	NO_x	HC	CO	Sulfur Content (%) Anth. Coal	Sulfur Content (%) Bitum. Coal	Sulfur Content (%) Dist. Oil	Sulfur Content (%) Resid. Oil	Ash Content (%) Anth. Coal	Ash Content (%) Bitum. Coal	Anth. 10^2 tons	Bitumin. 10^1 tons	Residential Fuel Dist. Oil 10^4 Gal.	Residential Fuel Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
82						06	21	02	03	09	10	95		954	5	1173	2	A	A	1

Commercial and Institutional Fuel Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	Industrial Fuel Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	Off-Highway Diesel Farm 10^3 Gals.	Off-Highway Diesel Constr. 10^4 Gals.		Action		cd
		556	397	376			611				280	13	233		A	A	2

On Site Incineration Residential 10^1 tons	Industrial 10^2 tons	Comm. Inst. 10^2 tons	Open Burning Residential 10^2 tons	Open Burning Industrial 10^2 tons	Comm'l-Instill. 10^2 tons	Off-Highway Diesel Industrial Equipment 10^3 Gals.	Off-Highway Diesel Railroad 10^4 Gals.	County Population 10^3	Density Code	Action		cd
		86				2006	376	515		A	A	3

Aircraft Military LTO CYC 10^1	Aircraft Civil LTO CYC 10^1	Commercial LTO CYC 10^1	Vessels Anth. Coal 10^1 tons	Vessels Diesel Oil 10^4 Gals.	Vessels Resid. Oil 10^4 Gals.	Vessels Gasoline 10^3 Gals.	Construction Activity Acres	Agricult. Tilling Tilling-Acres	Off-Highway Gasoline Indus. Eqpt. 10^3 Gals.	Off-Highway Gasoline Farm 10^3 Gals.	Off-Highway Gasoline Constr. 10^3 Gals.	Off-Highway Gasoline Sm. Eng. 10^3 Gals.	Action		cd
				72	708	68	2093	5300	733	182	175	1659	A	A	4

Unpaved Roads 10^3 VMT	Unpaved Airstrips LTOs	Forest Fires Area - Acres	Forest Fires Quant. ton/acre	Agricult. + Misc. Burning Area - Acres	Agricult. + Misc. Burning Quant. tons/acre	Frost Control Orchard Heaters 10^2	Frost Control Days Fired days/yr	Structure Fires #/year	Prescribed Burning Area-Acres	Prescribed Burning Quant. tons/acre	Action		cd
185		1294	11	98	1			991			A	A	5

Comments	Action		cd
CAMDEN COUNTY 1982	A	A	6

EPA (DUR) 219
3/72

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date _____

Name of Person Completing Form _____

State	County	AQCR
31	176	045

Year of Record	Particulate	SO_2	NO_x	HC	CO	Anth. Coal	Bitum. Coal	Dist. Oil	Resid Oil	Anth. Coal	Bitum. Coal	Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action	cd
82						06	21	03	02	09	01	04	27	40	72	346		A	1

Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2tons	Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	Farm 10^3 Gals.	Constr. 10^4 Gals.	Action	cd
		1174	888				224					31	8	A	2

Residential 10^1 tons	Industrial 10^2 tons	Comm. Inst. 10^2 tons	Residential 10^2 tons	Industrial 10^2 tons	Comm'l - Instl. 10^2 tons	Industrial Equipment 10^3 Gals.	Railroad 10^4 Gals.	County Population 10^3	Density Code	Action	cd
6						763		152	2	A	3

Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	Construction Activity Acres	Agricult. Tilling Milling-Acres	Indus. Eqpt. 10^3 Gals.	Farm 10^3 Gals.	Constr. 10^3 Gals.	Sm. Eng. 10^3 Gals.	Action	cd
17	104	440		80	760	91	56	3340	282	466	66	627	A	4

Unpaved Roads 10^3 VMT	Unpaved Airstrips LTOs	Forest Fires Area - Acres	Forest Fires Quant. ton/acre	Agricult. + Misc. Burning Area - Acres	Agricult. + Misc. Burning Quant. tons/acre	Frost Control Orchard Heaters 10^2	Frost Control Days Fired days/yr	Structure Fires #/year	Prescribed Burning Area-Acres	Prescribed Burning Quant. tons/acre	Action	cd
329	671	620	11	458	1			223	7	70	A	5

COMMENTS

GLOUCESTER COUNTY 1982

Action	cd
A	6

EPA (DURI 219
3/72

APPENDIX E

AREA SOURCE GRID ALLOCATION DATA

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PH10 STUDY - BUCKS COUNTY PA

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VHT	MISC	OTHER
	HHHHHH	NNNNNN	OOOOOO6Q				O R	JKL	IIIS	QP	O6QH	TU	06 HR

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
1	61776	.012	846	.002	8	.002	1	.004	1	.003	9	.002	624	.005	279	.002	0	.0	0	.0	0	.0	0	.0
2	61776	.012	1611	.003	22	.004	1	.004	2	.006	25	.004	1680	.013	550	.004	0	.0	0	.0	0	.0	0	.0
3	61776	.012	777	.002	2	.000	0	.0	0	.0	3	.001	240	.002	244	.002	0	.0	0	.0	0	.0	0	.0
4	61776	.012	1426	.003	10	.002	1	.004	1	.003	11	.002	612	.005	453	.003	0	.0	0	.0	0	.0	0	.0
5	61776	.012	706	.001	15	.003	1	.004	1	.003	16	.003	420	.003	225	.002	0	.0	0	.0	0	.0	0	.0
6	61776	.012	1758	.004	24	.005	2	.007	2	.006	27	.005	1224	.010	584	.004	0	.0	0	.0	0	.0	0	.0
7	61776	.012	838	.002	8	.002	1	.004	1	.003	10	.002	480	.004	277	.002	0	.0	0	.0	0	.0	0	.0
8	61776	.012	1219	.003	16	.003	1	.004	1	.003	18	.003	408	.003	392	.003	0	.0	0	.0	0	.0	0	.0
9	61776	.012	1877	.004	32	.006	2	.007	2	.006	34	.006	1260	.010	584	.004	0	.0	0	.0	0	.0	0	.0
10	61776	.012	834	.002	7	.001	0	.0	0	.0	8	.001	480	.004	262	.002	0	.0	0	.0	0	.0	0	.0
11	61776	.012	759	.002	13	.003	1	.004	1	.003	15	.003	420	.003	239	.002	0	.0	0	.0	0	.0	0	.0
12	61776	.012	1175	.002	16	.003	1	.004	1	.003	18	.003	480	.004	375	.003	0	.0	0	.0	38	.070	0	.0
13	61776	.012	485	.001	5	.001	0	.0	0	.0	6	.001	180	.001	156	.001	0	.0	0	.0	38	.070	0	.0
14	61776	.012	2026	.004	22	.004	1	.004	2	.006	24	.004	780	.006	609	.004	0	.0	0	.0	0	.0	0	.0
15	61776	.012	9112	.019	173	.034	9	.034	10	.031	193	.034	3600	.029	3274	.023	0	.0	1	.091	68	.126	90	.192
16	61776	.012	4242	.009	81	.016	4	.015	5	.016	90	.016	2304	.018	1453	.010	0	.0	0	.0	0	.0	0	.0
17	61776	.012	1012	.002	15	.003	1	.004	1	.003	17	.003	576	.005	321	.002	0	.0	0	.0	0	.0	0	.0
18	61776	.012	623	.001	11	.002	1	.004	1	.003	13	.002	300	.002	198	.001	0	.0	0	.0	0	.0	0	.0
19	61776	.012	1247	.003	18	.004	1	.004	1	.003	20	.004	492	.004	399	.003	0	.0	0	.0	38	.070	0	.0
20	61776	.012	742	.002	9	.002	0	.0	1	.003	10	.002	240	.002	238	.002	0	.0	0	.0	38	.070	0	.0
22	61776	.012	315	.001	10	.002	1	.004	1	.003	11	.002	240	.002	101	.001	0	.0	0	.0	2	.004	0	.0
23	61776	.012	1553	.003	29	.006	2	.007	2	.006	33	.006	840	.007	480	.003	0	.0	0	.0	0	.0	0	.0
24	61776	.012	3241	.007	135	.027	7	.026	9	.028	151	.027	2076	.016	1009	.007	0	.0	0	.0	45	.083	60	.128
25	61776	.012	3997	.008	42	.008	2	.007	3	.009	47	.008	1296	.010	1324	.009	0	.0	0	.0	51	.094	0	.0
26	61776	.012	1936	.004	29	.006	1	.004	2	.006	32	.006	780	.006	607	.004	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
27	61776	.012	598	.001	11	.002	1	.004	1	.003	13	.002	264	.002	191	.001	0	.0	0	.0	0	.0	0	.0
28	61776	.012	1682	.004	27	.005	1	.004	2	.006	30	.005	468	.004	541	.004	0	.0	0	.0	0	.0	0	.0
29	61776	.012	1817	.004	24	.005	1	.004	2	.006	27	.005	444	.004	605	.004	0	.0	0	.0	0	.0	0	.0
30	61776	.012	864	.002	7	.001	0	.0	0	.0	8	.001	240	.002	317	.002	0	.0	0	.0	0	.0	0	.0
35	61776	.012	252	.001	4	.001	0	.0	0	.0	4	.001	96	.001	77	.001	0	.0	0	.0	0	.0	0	.0
36	61776	.012	1230	.003	16	.004	1	.004	1	.003	20	.004	360	.003	379	.003	0	.0	0	.0	0	.0	0	.0
37	61776	.012	12616	.026	129	.025	6	.022	8	.025	144	.025	3060	.024	4215	.030	0	.0	0	.0	0	.0	0	.0
38	61776	.012	3037	.006	36	.007	2	.007	2	.006	40	.007	1656	.013	910	.006	0	.0	0	.0	0	.0	0	.0
39	61776	.012	3487	.007	63	.012	3	.011	3	.009	71	.013	2064	.016	1080	.008	0	.0	0	.0	0	.0	0	.0
40	61776	.012	1576	.003	23	.005	1	.004	2	.006	26	.005	408	.003	507	.004	0	.0	0	.0	0	.0	0	.0
41	61776	.012	2463	.005	34	.007	2	.007	2	.006	38	.007	708	.006	821	.006	0	.0	0	.0	0	.0	0	.0
42	61776	.012	1386	.003	13	.003	1	.004	1	.003	14	.002	396	.003	491	.003	0	.0	0	.0	0	.0	0	.0
43	61776	.012	2326	.005	45	.009	2	.007	2	.006	50	.009	1440	.011	979	.007	0	.0	0	.0	0	.0	0	.0
53	61776	.012	103	.000	3	.001	0	.0	0	.0	3	.001	48	.000	32	.000	0	.0	0	.0	0	.0	0	.0
54	61776	.012	2873	.006	110	.022	6	.022	7	.022	121	.021	1560	.012	888	.006	0	.0	0	.0	0	.0	0	.0
55	61776	.012	4105	.009	47	.009	3	.011	3	.009	52	.009	1044	.008	1186	.008	0	.0	0	.0	0	.0	0	.0
56	61776	.012	5071	.011	34	.007	2	.007	2	.006	39	.007	2148	.017	1278	.009	0	.0	0	.0	0	.0	0	.0
57	61776	.012	14708	.031	152	.030	7	.026	9	.028	168	.030	4560	.036	5061	.035	0	.0	6	.545	112	.207	108	.231
58	61776	.012	2955	.006	41	.008	2	.007	3	.009	45	.008	876	.007	912	.006	0	.0	0	.0	0	.0	0	.0
59	61776	.012	1904	.004	22	.004	1	.004	1	.003	25	.004	660	.005	586	.004	0	.0	0	.0	0	.0	0	.0
60	61776	.012	1599	.003	5	.001	0	.0	0	.0	5	.001	480	.004	507	.004	0	.0	0	.0	0	.0	0	.0
61	61776	.012	778	.002	1	.000	0	.0	0	.0	1	.000	240	.002	233	.002	0	.0	0	.0	0	.0	0	.0
74	61776	.012	2965	.006	43	.008	2	.007	3	.009	49	.009	804	.006	818	.006	0	.0	0	.0	0	.0	0	.0
75	61776	.012	6001	.012	92	.018	5	.019	6	.019	102	.018	2400	.019	1695	.012	0	.0	0	.0	0	.0	0	.0
76	61776	.012	6437	.013	88	.017	5	.019	6	.019	99	.017	1464	.012	1798	.013	0	.0	0	.0	7	.013	90	.192

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
77	61776	.012	2020	.004	30	.006	2	.007	2	.006	34	.006	804	.006	586	.004	0	.0	0	.0	0	.0	0	.0
78	61776	.012	3046	.006	36	.007	2	.007	2	.006	41	.007	1128	.009	867	.006	0	.0	0	.0	7	.013	90	.192
79	61776	.012	1884	.004	20	.004	1	.004	1	.003	23	.004	840	.007	572	.004	0	.0	0	.0	0	.0	0	.0
80	61776	.012	2541	.005	30	.006	2	.007	2	.006	34	.006	780	.006	717	.005	0	.0	0	.0	0	.0	0	.0
81	61776	.012	1236	.003	18	.004	1	.004	1	.003	20	.004	360	.003	348	.002	0	.0	0	.0	0	.0	0	.0
97	61776	.012	1049	.002	21	.004	1	.004	1	.003	23	.004	300	.002	297	.002	0	.0	0	.0	0	.0	0	.0
98	61776	.012	16332	.034	96	.019	5	.019	6	.019	107	.019	1416	.011	4143	.029	0	.0	0	.0	17	.031	10	.021
99	61776	.012	13523	.028	76	.015	3	.011	5	.016	84	.015	2736	.022	3416	.024	0	.0	0	.0	0	.0	0	.0
100	61776	.012	8101	.017	29	.006	2	.007	2	.006	33	.006	840	.007	2115	.015	0	.0	0	.0	0	.0	0	.0
101	61776	.012	6882	.014	102	.020	5	.019	6	.019	113	.020	2016	.016	2074	.015	0	.0	0	.0	0	.0	0	.0
102	61776	.012	4099	.009	77	.015	4	.015	5	.016	87	.015	1260	.010	1138	.008	0	.0	1	.091	10	.018	2	.004
103	61776	.012	13415	.028	66	.013	3	.011	4	.012	74	.013	2340	.019	4010	.028	0	.0	0	.0	0	.0	0	.0
104	61776	.012	11235	.023	120	.024	7	.026	8	.025	134	.024	5040	.040	3784	.027	10	.067	0	.0	0	.0	0	.0
121	61776	.012	2276	.005	11	.002	0	.0	1	.003	12	.002	420	.003	626	.004	0	.0	0	.0	0	.0	0	.0
122	61776	.012	22335	.046	156	.031	8	.030	9	.028	173	.030	4980	.040	6156	.043	0	.0	0	.0	0	.0	0	.0
123	61776	.012	16800	.035	105	.021	5	.019	7	.022	116	.020	3216	.026	4694	.033	0	.0	0	.0	0	.0	0	.0
124	61776	.012	11351	.024	115	.023	7	.026	8	.025	128	.023	2400	.019	3207	.022	0	.0	0	.0	0	.0	0	.0
125	61776	.012	17975	.037	298	.059	15	.056	18	.056	333	.059	6036	.048	4811	.034	0	.0	1	.091	30	.055	8	.017
126	61776	.012	33124	.069	188	.037	9	.034	11	.034	207	.036	4404	.035	9330	.065	0	.0	0	.0	0	.0	0	.0
127	61776	.012	3675	.008	30	.006	2	.007	2	.006	33	.006	1860	.015	1257	.009	11	.074	0	.0	0	.0	0	.0
128	61776	.012	211	.000	0	.0	0	.0	0	.0	0	.0	96	.001	78	.001	12	.081	0	.0	0	.0	0	.0
148	61776	.012	35272	.073	322	.063	17	.064	20	.062	358	.063	8340	.066	9635	.068	1	.007	1	.091	10	.018	2	.004
149	61776	.012	34481	.072	165	.032	9	.034	12	.037	185	.033	7296	.058	9104	.064	11	.074	1	.091	30	.055	8	.017
150	61776	.012	930	.002	1	.000	0	.0	0	.0	2	.000	600	.005	336	.002	11	.074	0	.0	0	.0	0	.0
151	61776	.012	238	.000	0	.0	0	.0	0	.0	0	.0	108	.001	87	.001	12	.081	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
172	61776	.012	23336	.049	293	.058	16	.060	20	.062	327	.058	4260	.034	7257	.051	19	.128	0	.0	0	.0
173	61776	.012	10950	.023	70	.014	4	.015	4	.012	78	.014	3360	.027	3607	.025	16	.107	0	.0	0	.0
515	15444	.003	2809	.006	86	.017	5	.019	5	.016	96	.017	600	.005	908	.006	0	.0	0	.0	0	.0
516	15444	.003	5045	.011	121	.024	6	.022	8	.025	135	.024	780	.006	1644	.012	0	.0	0	.0	0	.0
517	15444	.003	4942	.010	51	.010	2	.007	3	.009	57	.010	600	.005	1586	.011	0	.0	0	.0	0	.0
533	15444	.003	3680	.008	35	.007	2	.007	2	.006	38	.007	420	.003	1204	.008	0	.0	0	.0	0	.0
534	15444	.003	7355	.015	79	.016	4	.015	5	.016	87	.015	780	.006	2392	.017	0	.0	0	.0	0	.0
550	15444	.003	3251	.007	25	.005	1	.004	1	.003	28	.005	456	.004	1048	.007	0	.0	0	.0	0	.0
551	15444	.003	5664	.012	77	.015	4	.015	5	.016	86	.015	804	.006	1955	.014	10	.067	0	.0	0	.0
566	15444	.003	216	.000	5	.001	0	.0	0	.0	6	.001	36	.000	86	.001	10	.067	0	.0	0	.0
567	15444	.003	3606	.008	65	.013	4	.015	4	.012	73	.013	564	.004	1331	.009	14	.094	0	.0	0	.0
568	15444	.003	721	.002	18	.004	1	.004	1	.003	20	.004	120	.001	287	.002	12	.081	0	.0	0	.0
803	15444	.003	198	.000	6	.001	0	.0	0	.0	6	.001	60	.000	52	.000	0	.0	0	.0	0	.0
804	15444	.003	3164	.007	50	.010	3	.011	3	.009	57	.010	840	.007	919	.006	0	.0	0	.0	0	.0
805	15444	.003	6497	.014	45	.009	2	.007	3	.009	50	.009	1104	.009	2007	.014	0	.0	0	.0	0	.0
806	15444	.003	4898	.010	99	.019	5	.019	6	.019	111	.020	1020	.008	1528	.011	0	.0	0	.0	0	.0
807	15444	.003	2841	.006	31	.006	2	.007	2	.006	35	.006	660	.005	797	.006	0	.0	0	.0	0	.0
TOTAL	4988412		480394		5092		267		322		5679		126000		142736		149		11		541		468

***EXECUTION TERMINATING NORMALLY. 92 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		ALLOC PROP	COMM EMP #	ALLOC PROP	MFG EMP #	ALLOC PROP	AGRI EMP #	ALLOC PROP	CONS EMP #	ALLOC PROP	RAILROAD #	ALLOC PROP	REC VSLS #	ALLOC PROP	UNPV RDS #	ALLOC PROP	UNPV AIR #	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
1	121	.001	58	.001	43	.001	0	.0	20	.002	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
2	257	.002	120	.001	81	.001	0	.0	36	.003	0	.0	4	.042	3513	.100	0	.0	0	.0	0	.0
3	64	.000	29	.000	2	.000	0	.0	33	.003	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
4	150	.001	77	.001	23	.000	0	.0	48	.004	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
5	111	.001	76	.001	26	.000	0	.0	7	.001	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
6	167	.001	125	.001	23	.000	2	.001	15	.001	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
7	79	.001	56	.001	4	.000	6	.004	9	.001	0	.0	4	.042	3513	.100	0	.0	0	.0	0	.0
8	231	.001	78	.001	105	.002	1	.001	44	.004	20	.025	0	.0	3513	.100	0	.0	0	.0	0	.0
9	383	.002	162	.002	167	.003	1	.001	48	.004	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
10	51	.000	29	.000	2	.000	0	.0	19	.002	0	.0	0	.0	3513	.100	0	.0	0	.0	0	.0
11	88	.001	63	.001	13	.000	1	.001	8	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
12	148	.001	103	.001	12	.000	10	.007	16	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
13	56	.000	38	.000	1	.000	6	.004	7	.001	0	.0	4	.042	0	.0	0	.0	0	.0	0	.0
14	315	.002	95	.001	200	.004	3	.002	16	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
15	6035	.039	2616	.031	3084	.054	20	.014	310	.028	25	.031	0	.0	0	.0	0	.0	0	.0	0	.0
16	1783	.012	926	.011	714	.013	18	.013	120	.011	10	.012	0	.0	0	.0	0	.0	0	.0	0	.0
17	171	.001	109	.001	21	.000	2	.001	40	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
18	103	.001	54	.001	21	.000	2	.001	25	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
19	207	.001	106	.001	41	.001	12	.008	42	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
20	135	.001	63	.001	34	.001	12	.008	23	.002	0	.0	4	.042	0	.0	0	.0	0	.0	0	.0
22	56	.000	19	.000	27	.000	0	.0	10	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
23	255	.002	82	.001	145	.003	1	.001	27	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
24	796	.005	396	.005	346	.006	6	.004	48	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
25	1260	.008	670	.008	430	.008	10	.007	151	.014	35	.043	0	.0	0	.0	0	.0	0	.0	0	.0
26	450	.003	318	.004	40	.001	4	.003	88	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
27	125 .001	54 .001	35 .001	4 .003	32 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
28	478 .003	159 .002	187 .003	32 .023	100 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
29	499 .003	189 .002	186 .003	32 .023	89 .008	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
30	155 .001	113 .001	24 .000	2 .001	9 .001	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
35	51 .000	29 .000	19 .000	0 .0	3 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
36	303 .002	221 .003	65 .001	1 .001	16 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
37	5939 .038	1965 .023	3741 .066	9 .006	222 .020	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
38	663 .004	408 .005	225 .004	2 .001	25 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
39	1106 .007	297 .003	745 .013	10 .007	55 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
40	542 .004	222 .003	194 .003	30 .021	97 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
41	1126 .007	687 .008	262 .005	13 .009	160 .014	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
42	301 .002	212 .002	55 .001	3 .002	23 .002	25 .031	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
43	2072 .013	861 .010	1092 .019	3 .002	87 .008	20 .025	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
53	36 .000	23 .000	11 .000	0 .0	1 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
54	1418 .009	787 .009	583 .010	5 .004	39 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
55	1184 .008	623 .007	397 .007	21 .015	138 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
56	1039 .007	577 .007	280 .005	24 .017	160 .014	20 .025	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
57	8451 .055	6338 .075	1462 .026	170 .120	475 .043	20 .025	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
58	1039 .007	668 .008	235 .004	11 .008	123 .011	20 .025	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
59	513 .003	276 .003	144 .003	5 .004	81 .007	15 .019	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
60	166 .001	133 .002	13 .000	5 .004	12 .001	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
61	59 .000	51 .001	1 .000	3 .002	5 .000	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
74	669 .004	294 .003	168 .003	36 .025	170 .015	20 .025	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
75	1554 .010	684 .008	385 .007	119 .084	280 .025	10 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
76	1830 .012	1070 .013	614 .011	12 .008	135 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
77	423 .003	316 .004	52 .001	6 .004	49 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
78	1267 .008	289 .003	493 .009	8 .006	454 .041	30 .037	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
79	1112 .007	467 .005	423 .007	14 .010	200 .018	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
80	389 .003	269 .003	86 .002	8 .006	25 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
81	136 .001	182 .001	23 .000	1 .001	9 .001	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
97	382 .002	184 .002	146 .003	2 .001	35 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
98	3356 .022	1739 .020	1265 .022	16 .011	329 .030	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
99	2691 .017	1822 .021	553 .010	34 .024	280 .025	40 .050	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
100	623 .004	374 .004	55 .001	49 .035	145 .013	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
101	2024 .013	1312 .015	541 .010	32 .023	140 .013	20 .025	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
102	857 .006	556 .007	209 .004	21 .015	69 .006	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
103	2205 .014	1364 .016	638 .011	40 .028	162 .015	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
104	3213 .021	2082 .024	1005 .018	21 .015	105 .009	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
121	1031 .007	343 .004	636 .011	2 .001	50 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
122	8826 .057	5149 .061	3138 .055	8 .006	532 .048	10 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
123	2613 .017	1494 .018	517 .009	43 .030	559 .050	65 .081	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
124	1894 .012	1428 .017	132 .002	101 .071	234 .021	10 .012	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
125	7320 .047	6796 .080	304 .005	27 .019	193 .017	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
126	7087 .046	4196 .049	2644 .047	19 .013	225 .020	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
127	5928 .038	1021 .012	4789 .085	2 .001	106 .010	100 .124	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
128	918 .006	82 .001	817 .014	0 .0	18 .002	30 .037	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
148	7549 .049	5759 .068	1288 .023	55 .039	447 .040	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
149	7798 .050	4436 .052	2776 .049	7 .005	578 .052	0 .0	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
150	3599 .023	344 .004	3159 .056	0 .0	87 .008	60 .075	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
151	1033 .007	92 .001	919 .016	0 .0	20 .002	30 .037	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	IIFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
172	6835 .014	2635 .031	3698 .065	32 .023	460 .041	20 .025	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
173	7055 .046	3310 .039	3603 .064	17 .012	127 .011	40 .050	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
515	2028 .013	1464 .017	442 .008	9 .006	111 .010	10 .012	0 .0	14 .000	0 .0	0 .0	0 .0	0 .0
516	2485 .016	1989 .023	395 .007	17 .012	83 .007	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
517	1269 .008	1018 .012	183 .003	11 .008	57 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
533	1004 .006	746 .009	166 .003	2 .001	90 .008	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
534	1392 .009	951 .011	271 .005	2 .001	167 .015	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
550	1205 .008	776 .009	250 .004	6 .004	173 .016	7 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
551	2344 .015	1039 .012	1674 .019	21 .015	210 .019	23 .029	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
566	144 .001	38 .000	102 .002	2 .001	3 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
567	1990 .013	718 .008	1148 .020	21 .015	103 .009	10 .012	4 .042	0 .0	0 .0	0 .0	0 .0	0 .0
568	480 .003	126 .001	339 .006	6 .004	9 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
803	112 .001	41 .000	50 .001	1 .001	20 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
804	1836 .012	891 .010	696 .012	4 .003	243 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
805	2095 .014	1285 .015	515 .009	13 .009	279 .025	10 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
806	2030 .013	1568 .018	279 .005	42 .030	139 .012	30 .037	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
807	1150 .007	1013 .012	60 .001	28 .020	50 .004	20 .025	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
TOTAL	154489	85033	86607	1419	11122	805	96	35144	0	0	0	0

SUB-COUNTY ALLOCATIONS PAGE 1

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP
1	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
2	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
3	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	40 .023	0 .0	0 .0	0 .0	0 .0
4	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .006	0 .0	0 .0	0 .0	0 .0
5	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
6	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
7	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
8	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .073
9	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	25 .015	0 .0	0 .0	0 .0	0 .0
10	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
11	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	20 .012	0 .0	0 .0	0 .0	0 .0
12	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
13	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
14	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	25 .015	0 .0	0 .0	0 .0	0 .0
15	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	25 .015	0 .0	0 .0	0 .0	10 .073
16	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .006	0 .0	0 .0	0 .0	5 .036
17	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
18	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	60 .035	0 .0	0 .0	0 .0	0 .0
19	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	55 .032	0 .0	0 .0	0 .0	0 .0
20	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .003	0 .0	0 .0	0 .0	0 .0
22	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	15 .009	0 .0	0 .0	0 .0	0 .0
23	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	8 .005	0 .0	0 .0	0 .0	0 .0
24	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .006	0 .0	0 .0	0 .0	0 .0
25	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .073
26	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	50 .029	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOP ACRS	
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
27	0	.0	0	.0	0	.0	0	.0	0	.0	65	.038	0	.0
28	0	.0	0	.0	0	.0	0	.0	0	.0	65	.038	0	.0
29	0	.0	0	.0	0	.0	0	.0	0	.0	30	.017	0	.0
30	0	.0	0	.0	0	.0	0	.0	0	.0	25	.015	0	.0
35	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
36	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0
37	0	.0	0	.0	0	.0	0	.0	0	.0	7	.004	0	.0
38	0	.0	0	.0	0	.0	0	.0	0	.0	30	.017	0	.0
39	0	.0	0	.0	0	.0	0	.0	0	.0	65	.038	0	.0
40	0	.0	0	.0	0	.0	0	.0	0	.0	70	.041	0	.0
41	0	.0	0	.0	0	.0	0	.0	0	.0	80	.046	0	.0
42	0	.0	0	.0	0	.0	0	.0	0	.0	40	.023	0	.0
43	0	.0	0	.0	0	.0	0	.0	0	.0	20	.012	0	.0
53	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
54	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0
55	0	.0	0	.0	0	.0	0	.0	0	.0	50	.029	0	.0
56	0	.0	0	.0	0	.0	0	.0	0	.0	40	.023	0	.0
57	0	.0	0	.0	0	.0	0	.0	0	.0	30	.017	0	.0
58	0	.0	0	.0	0	.0	0	.0	0	.0	40	.023	0	.0
59	0	.0	0	.0	0	.0	0	.0	0	.0	50	.029	0	.0
60	0	.0	0	.0	0	.0	0	.0	0	.0	5	.003	0	.0
61	0	.0	0	.0	0	.0	0	.0	0	.0	7	.004	0	.0
74	0	.0	0	.0	0	.0	0	.0	0	.0	12	.007	0	.0
75	0	.0	0	.0	0	.0	0	.0	0	.0	60	.035	0	.0
76	0	.0	0	.0	0	.0	0	.0	0	.0	30	.017	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	CRP ACRS												FOR ACRS	
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
77	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
78	0	.0	0	.0	0	.0	0	.0	0	.0	40	.023	0	.0	0	.0
79	0	.0	0	.0	0	.0	0	.0	0	.0	40	.023	0	.0	0	.0
80	0	.0	0	.0	0	.0	0	.0	0	.0	50	.029	0	.0	0	.0
81	0	.0	0	.0	0	.0	0	.0	0	.0	60	.035	0	.0	0	.0
97	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0	0	.0
98	0	.0	0	.0	0	.0	0	.0	0	.0	16	.009	0	.0	0	.0
99	0	.0	0	.0	0	.0	0	.0	0	.0	16	.009	0	.0	0	.0
100	0	.0	0	.0	0	.0	0	.0	0	.0	60	.035	0	.0	0	.0
101	0	.0	0	.0	0	.0	0	.0	0	.0	65	.038	0	.0	0	.0
102	0	.0	0	.0	0	.0	0	.0	0	.0	40	.023	0	.0	0	.0
103	0	.0	0	.0	0	.0	0	.0	0	.0	75	.044	0	.0	0	.0
104	0	.0	0	.0	0	.0	0	.0	0	.0	30	.017	0	.0	0	.0
121	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
122	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
123	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
124	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.073
125	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0	10	.073
126	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0	10	.073
127	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.073
128	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.109
148	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
149	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
150	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
151	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.073

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS	
	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP	$ ALLOC	PROP
172	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.073
173	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
515	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
516	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.022
517	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.022
533	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007
534	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.036
550	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007
551	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.022
566	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
567	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
568	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
803	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
804	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
805	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
806	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007
807	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.022
TOTAL	0		0		0		0		0		172		0		0		137	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
1		1200	477.0	4490.0
2		1200	482.0	4490.0
3		1200	472.0	4485.0
4		1200	477.0	4485.0
5		1200	482.0	4485.0
6		1200	487.0	4485.0
7		1200	492.0	4485.0
8		1200	467.0	4480.0
9		1200	472.0	4480.0
10		1200	477.0	4480.0
11		1200	482.0	4480.0
12		1200	487.0	4480.0
13		1200	492.0	4480.0
14		1200	462.0	4475.0
15		1200	467.0	4475.0
16		1200	472.0	4475.0
17		1200	477.0	4475.0
18		1200	482.0	4475.0
19		1200	487.0	4475.0
20		1200	492.0	4475.0
22		1200	457.0	4470.0
23		1200	462.0	4470.0
24		1200	467.0	4470.0
25		1200	472.0	4470.0
26		1200	477.0	4470.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
27	1200	482.0	4470.0
28	1200	487.0	4470.0
29	1200	492.0	4470.0
30	1200	497.0	4470.0
35	1200	462.0	4465.0
36	1200	467.0	4465.0
37	1200	472.0	4465.0
38	1200	477.0	4465.0
39	1200	482.0	4465.0
40	1200	487.0	4465.0
41	1200	492.0	4465.0
42	1200	497.0	4465.0
43	1200	502.0	4465.0
53	1200	467.0	4460.0
54	1200	472.0	4460.0
55	1200	477.0	4460.0
56	1200	482.0	4460.0
57	1200	487.0	4460.0
58	1200	492.0	4460.0
59	1200	497.0	4460.0
60	1200	502.0	4460.0
61	1200	507.0	4460.0
74	1200	477.0	4455.0
75	1200	482.0	4455.0
76	1200	487.0	4455.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
77		1200	492.0	4455.0
78		1200	497.0	4455.0
79		1200	502.0	4455.0
80		1200	507.0	4455.0
81		1200	512.0	4455.0
97		1200	482.0	4450.0
98		1200	487.0	4450.0
99		1200	492.0	4450.0
100		1200	497.0	4450.0
101		1200	502.0	4450.0
102		1200	507.0	4450.0
103		1200	512.0	4450.0
104		1200	517.0	4450.0
121		1200	487.0	4445.0
122		1200	492.0	4445.0
123		1200	497.0	4445.0
124		1200	502.0	4445.0
125		1200	507.0	4445.0
126		1200	512.0	4445.0
127		1200	517.0	4445.0
128		1200	522.0	4445.0
148		1200	507.0	4440.0
149		1200	512.0	4440.0
150		1200	517.0	4440.0
151		1200	522.0	4440.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
172	1200	507.0	4435.0
173	1200	512.0	4435.0
515	146 1200	499.5	4440.0
516	147 1200	502.0	4440.0
517	147 1200	504.5	4440.0
533	171 1200	502.0	4437.5
534	171 1200	504.5	4437.5
550	171 1200	502.0	4435.0
551	171 1200	504.5	4435.0
566	194 1200	499.5	4432.5
567	195 1200	502.0	4432.5
568	195 1200	504.5	4432.5
803	145 1200	494.5	4442.5
804	146 1200	497.0	4442.5
805	146 1200	499.5	4442.5
806	147 1200	502.0	4442.5
807	147 1200	504.5	4442.5

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - BURLINGTON COUNTY NJ

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VMT	MISC	OTHER
	HHHHHH	NNNNNN	OOOOOOQ	NNN			O R	JKL	IIIS	QP	O6QH	TU	06 HQ

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
128	61776	.010	2326	.006	103	.021	6	.024	8	.026	116	.022	462	.009	648	.008	0	.0	0	.0	0	.0	0	.0
129	61776	.010	606	.002	23	.005	1	.004	2	.006	26	.005	119	.002	204	.002	0	.0	0	.0	0	.0	0	.0
149	61776	.010	2225	.006	31	.006	2	.008	2	.006	34	.006	363	.007	739	.007	11	.096	0	.0	0	.0	0	.0
150	61776	.010	2610	.007	43	.009	2	.008	3	.010	47	.009	627	.012	872	.008	11	.096	0	.0	0	.0	0	.0
151	61776	.010	9873	.027	264	.055	15	.060	18	.058	298	.055	1921	.036	3245	.030	12	.105	0	.0	0	.0	0	.0
152	61776	.010	2245	.006	57	.012	3	.012	4	.013	64	.012	363	.007	573	.005	0	.0	0	.0	0	.0	0	.0
153	61776	.010	1492	.004	9	.002	0	.0	0	.0	10	.002	165	.003	428	.004	0	.0	0	.0	0	.0	0	.0
172	61776	.010	4100	.011	44	.009	2	.008	3	.010	50	.009	429	.008	1387	.013	19	.167	0	.0	0	.0	0	.0
173	61776	.010	10658	.029	111	.023	5	.020	6	.019	124	.023	1947	.036	3427	.031	16	.140	0	.0	0	.0	0	.0
174	61776	.010	3549	.010	112	.023	6	.024	8	.026	126	.023	838	.015	1161	.011	0	.0	0	.0	0	.0	0	.0
175	61776	.010	1685	.005	181	.038	11	.044	13	.042	206	.038	363	.007	500	.005	0	.0	0	.0	0	.0	0	.0
176	61776	.010	1388	.004	53	.011	3	.012	4	.013	60	.011	271	.005	323	.003	0	.0	0	.0	0	.0	0	.0
177	61776	.010	4827	.013	27	.006	1	.004	1	.003	30	.006	396	.007	1538	.014	0	.0	0	.0	0	.0	0	.0
196	61776	.010	43137	.118	277	.057	17	.068	18	.058	308	.057	6666	.123	9999	.091	0	.0	0	.0	0	.0	0	.0
197	61776	.010	8527	.023	317	.066	19	.076	22	.071	357	.066	1769	.033	2632	.024	0	.0	0	.0	0	.0	0	.0
198	61776	.010	1568	.004	60	.012	3	.012	4	.013	68	.013	403	.007	478	.004	0	.0	0	.0	0	.0	0	.0
199	61776	.010	756	.002	44	.009	2	.008	3	.010	50	.009	198	.004	231	.002	0	.0	0	.0	2	.020	0	.0
200	61776	.010	1593	.004	57	.012	3	.012	3	.010	63	.012	383	.007	340	.003	0	.0	10	.111	1	.010	0	.0
201	61776	.010	7054	.019	67	.014	3	.012	3	.010	73	.014	594	.011	2181	.020	0	.0	30	.333	2	.020	0	.0
202	61776	.010	4421	.012	19	.004	1	.004	1	.003	21	.004	231	.004	1535	.014	0	.0	10	.111	1	.010	0	.0
221	61776	.010	14241	.039	302	.063	17	.068	21	.068	340	.063	2561	.047	3651	.033	0	.0	0	.0	0	.0	0	.0
222	61776	.010	3705	.010	94	.019	5	.020	6	.019	105	.020	799	.015	1101	.010	0	.0	0	.0	0	.0	0	.0
223	61776	.010	16506	.045	157	.033	7	.028	9	.029	172	.032	3181	.059	5345	.049	0	.0	0	.0	0	.0	0	.0
224	61776	.010	1625	.004	25	.005	1	.004	2	.006	28	.005	356	.007	505	.005	0	.0	0	.0	0	.0	0	.0
225	61776	.010	4395	.012	66	.014	3	.012	4	.013	72	.013	627	.012	1171	.011	0	.0	10	.111	1	.010	0	.0

SUB-COUNTY NO.	AREA $	AREA ALLOC PROP	POPULATN $	POPULATN ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	HOUSES $	HOUSES ALLOC PROP	COMM VIL $	COMM VIL ALLOC PROP	MIL AIR $	MIL AIR ALLOC PROP	CIVL AIR $	CIVL AIR ALLOC PROP	COMM AIR $	COMM AIR ALLOC PROP
226	61776	.010	5462	.015	29	.006	1	.004	2	.006	31	.006	330	.006	1849	.017	0	.0	30	.333	2	.020	0	.0
227	61776	.010	4675	.013	21	.004	1	.004	1	.003	23	.004	264	.005	1582	.014	0	.0	0	.0	0	.0	0	.0
246	61776	.010	5617	.015	96	.020	5	.020	6	.019	107	.020	515	.010	1666	.015	0	.0	0	.0	0	.0	0	.0
247	61776	.010	3456	.009	56	.012	3	.012	4	.013	62	.012	627	.012	1125	.010	0	.0	0	.0	48	.471	60	.600
248	61776	.010	2735	.007	31	.006	2	.008	2	.006	34	.006	350	.006	884	.008	0	.0	0	.0	0	.0	0	.0
249	61776	.010	3203	.009	58	.012	3	.012	3	.010	65	.012	594	.011	1006	.009	0	.0	0	.0	0	.0	0	.0
250	61776	.010	3620	.010	68	.014	3	.012	4	.013	75	.014	693	.013	1114	.010	0	.0	0	.0	0	.0	0	.0
251	61776	.010	3251	.009	23	.005	1	.004	1	.003	26	.005	297	.005	981	.009	0	.0	0	.0	0	.0	0	.0
252	61776	.010	5571	.015	31	.006	1	.004	2	.006	34	.006	422	.008	1724	.016	0	.0	0	.0	0	.0	0	.0
253	61776	.010	3231	.009	18	.004	1	.004	1	.003	20	.004	244	.005	999	.009	0	.0	0	.0	0	.0	0	.0
272	61776	.010	8564	.023	118	.024	6	.024	8	.026	133	.025	581	.011	2737	.025	0	.0	0	.0	0	.0	0	.0
273	61776	.010	2674	.007	27	.006	1	.004	2	.006	30	.006	172	.003	820	.008	0	.0	0	.0	0	.0	0	.0
274	61776	.010	1983	.005	17	.004	1	.004	1	.003	19	.004	139	.003	606	.006	0	.0	0	.0	7	.069	3	.030
275	61776	.010	1973	.005	15	.003	1	.004	1	.003	16	.003	145	.003	600	.005	0	.0	0	.0	4	.039	2	.020
276	61776	.010	2172	.006	20	.004	1	.004	1	.003	22	.004	198	.004	656	.006	0	.0	0	.0	0	.0	0	.0
277	61776	.010	3120	.009	26	.005	1	.004	2	.006	29	.005	290	.005	937	.009	0	.0	0	.0	0	.0	0	.0
278	61776	.010	1917	.005	13	.003	1	.004	1	.003	14	.003	165	.003	569	.005	0	.0	0	.0	0	.0	0	.0
279	61776	.010	1447	.004	10	.002	0	.0	1	.003	11	.002	132	.002	424	.004	0	.0	0	.0	0	.0	0	.0
299	61776	.010	3721	.010	49	.010	3	.012	3	.010	54	.010	244	.005	1016	.009	0	.0	0	.0	0	.0	0	.0
300	61776	.010	7162	.020	34	.007	2	.008	2	.006	37	.007	515	.010	2030	.019	0	.0	0	.0	0	.0	0	.0
301	61776	.010	5596	.015	28	.006	1	.004	2	.006	31	.006	416	.008	1602	.015	0	.0	0	.0	0	.0	0	.0
302	61776	.010	1244	.003	8	.002	0	.0	0	.0	9	.002	132	.002	374	.003	0	.0	0	.0	0	.0	0	.0
303	61776	.010	1130	.003	9	.002	1	.004	1	.003	10	.002	139	.003	330	.003	0	.0	0	.0	0	.0	0	.0
304	61776	.010	221	.001	6	.001	0	.0	0	.0	7	.001	66	.001	34	.000	0	.0	0	.0	0	.0	0	.0
305	61776	.010	221	.001	6	.001	0	.0	0	.0	7	.001	66	.001	34	.000	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA	POPULATN						HOUSES	COMM VSL	MIL AIR	CIVL AIR	COMM AIR
	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP
306	61776 .010	221 .001	6 .001	0 .0	0 .0	7 .001	66 .001	34 .000	0 .0	0 .0	0 .0	0 .0
326	61776 .010	3721 .010	49 .010	3 .012	3 .010	54 .010	244 .005	1016 .009	0 .0	0 .0	34 .333	35 .350
327	61776 .010	2496 .007	24 .005	1 .004	2 .006	27 .005	152 .003	761 .007	0 .0	0 .0	0 .0	0 .0
328	61776 .010	1183 .003	12 .002	1 .004	1 .003	13 .002	139 .003	364 .003	0 .0	0 .0	0 .0	0 .0
329	61776 .010	650 .002	4 .001	0 .0	0 .0	5 .001	139 .003	195 .002	0 .0	0 .0	0 .0	0 .0
330	61776 .010	624 .002	3 .001	0 .0	0 .0	3 .001	119 .002	183 .002	0 .0	0 .0	0 .0	0 .0
331	61776 .010	445 .001	5 .001	0 .0	0 .0	6 .001	99 .002	111 .001	0 .0	0 .0	0 .0	0 .0
332	61776 .010	221 .001	6 .001	0 .0	0 .0	7 .001	66 .001	34 .000	0 .0	0 .0	0 .0	0 .0
333	61776 .010	221 .001	6 .001	0 .0	0 .0	7 .001	66 .001	34 .000	0 .0	0 .0	0 .0	0 .0
334	61776 .010	132 .000	4 .001	0 .0	0 .0	4 .001	40 .001	20 .000	0 .0	0 .0	0 .0	0 .0
355	61776 .010	1728 .005	22 .005	1 .004	1 .003	25 .005	112 .002	476 .004	0 .0	0 .0	0 .0	0 .0
356	61776 .010	773 .002	8 .002	0 .0	0 .0	8 .001	59 .001	237 .002	0 .0	0 .0	0 .0	0 .0
357	61776 .010	398 .001	4 .001	0 .0	0 .0	5 .001	106 .002	127 .001	0 .0	0 .0	0 .0	0 .0
358	61776 .010	497 .001	6 .001	0 .0	0 .0	6 .001	132 .002	158 .001	0 .0	0 .0	0 .0	0 .0
359	61776 .010	610 .002	5 .001	0 .0	0 .0	5 .001	139 .003	186 .002	0 .0	0 .0	0 .0	0 .0
360	61776 .010	599 .002	4 .001	0 .0	0 .0	4 .001	119 .002	169 .002	0 .0	0 .0	0 .0	0 .0
361	61776 .010	321 .001	4 .001	0 .0	0 .0	5 .001	86 .002	76 .001	0 .0	0 .0	0 .0	0 .0
362	61776 .010	147 .000	4 .001	0 .0	0 .0	4 .001	53 .001	25 .000	0 .0	0 .0	0 .0	0 .0
363	61776 .010	179 .000	4 .001	0 .0	0 .0	4 .001	73 .001	38 .000	0 .0	0 .0	0 .0	0 .0
386	61776 .010	124 .000	1 .000	0 .0	0 .0	2 .000	33 .001	40 .000	0 .0	0 .0	0 .0	0 .0
387	61776 .010	313 .001	3 .001	0 .0	0 .0	4 .001	92 .002	100 .001	0 .0	0 .0	0 .0	0 .0
388	61776 .010	376 .001	3 .001	0 .0	0 .0	4 .001	132 .002	118 .001	0 .0	0 .0	0 .0	0 .0
389	61776 .010	162 .000	1 .000	0 .0	0 .0	1 .000	73 .001	49 .000	0 .0	0 .0	0 .0	0 .0
390	61776 .010	73 .000	0 .0	0 .0	0 .0	0 .0	66 .001	23 .000	0 .0	0 .0	0 .0	0 .0
391	61776 .010	69 .000	0 .0	0 .0	0 .0	0 .0	66 .001	34 .000	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA	POPULATN						HOUSES	COMM VSL	MIL AIR	CIVL AIR	COMM AIR
	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP
392	61776 .010	140 .000	0 .0	0 .0	0 .0	0 .0	92 .002	57 .001	0 .0	0 .0	0 .0	0 .0
410	61776 .010	51 .000	0 .0	0 .0	0 .0	0 .0	46 .001	16 .000	0 .0	0 .0	0 .0	0 .0
411	61776 .010	73 .000	0 .0	0 .0	0 .0	0 .0	66 .001	23 .000	0 .0	0 .0	0 .0	0 .0
412	61776 .010	66 .000	0 .0	0 .0	0 .0	0 .0	59 .001	21 .000	0 .0	0 .0	0 .0	0 .0
413	61776 .010	126 .000	0 .0	0 .0	0 .0	0 .0	79 .001	52 .000	0 .0	0 .0	0 .0	0 .0
414	61776 .010	157 .000	0 .0	0 .0	0 .0	0 .0	99 .002	66 .001	0 .0	0 .0	0 .0	0 .0
432	61776 .010	44 .000	0 .0	0 .0	0 .0	0 .0	40 .001	14 .000	0 .0	0 .0	0 .0	0 .0
433	61776 .010	58 .000	0 .0	0 .0	0 .0	0 .0	53 .001	19 .000	0 .0	0 .0	0 .0	0 .0
434	61776 .010	79 .000	0 .0	0 .0	0 .0	0 .0	66 .001	27 .000	0 .0	0 .0	0 .0	0 .0
435	61776 .010	140 .000	0 .0	0 .0	0 .0	0 .0	92 .002	57 .001	0 .0	0 .0	0 .0	0 .0
436	61776 .010	157 .000	0 .0	0 .0	0 .0	0 .0	99 .002	66 .001	0 .0	0 .0	0 .0	0 .0
453	61776 .010	36 .000	0 .0	0 .0	0 .0	0 .0	33 .001	12 .000	0 .0	0 .0	0 .0	0 .0
454	61776 .010	124 .000	0 .0	0 .0	0 .0	0 .0	86 .002	49 .000	0 .0	0 .0	0 .0	0 .0
455	61776 .010	157 .000	0 .0	0 .0	0 .0	0 .0	99 .002	66 .001	0 .0	0 .0	0 .0	0 .0
567	15444 .003	809 .002	1 .000	0 .0	0 .0	2 .000	132 .002	270 .002	15 .132	0 .0	0 .0	0 .0
568	15444 .003	3984 .011	10 .002	1 .004	1 .003	12 .002	693 .013	1318 .012	2 .018	0 .0	0 .0	0 .0
583	15444 .003	1061 .003	13 .003	1 .004	1 .003	14 .003	264 .005	382 .003	10 .088	0 .0	0 .0	0 .0
584	15444 .003	9690 .026	46 .010	3 .012	3 .010	49 .009	1914 .035	3149 .029	0 .0	0 .0	0 .0	0 .0
585	15444 .003	5897 .016	23 .005	2 .008	2 .006	26 .005	1089 .020	1673 .017	0 .0	0 .0	0 .0	0 .0
598	15444 .003	886 .002	26 .005	1 .004	2 .006	29 .005	165 .003	298 .003	5 .044	0 .0	0 .0	0 .0
599	15444 .003	5271 .014	65 .013	3 .012	4 .013	72 .013	1089 .020	1733 .016	9 .079	0 .0	0 .0	0 .0
600	15444 .003	2651 .007	39 .008	2 .008	2 .006	44 .008	858 .016	785 .007	0 .0	0 .0	0 .0	0 .0
601	15444 .003	6142 .017	38 .008	2 .008	2 .006	42 .008	759 .014	2112 .019	0 .0	0 .0	0 .0	0 .0
602	15444 .003	3789 .010	38 .008	2 .008	3 .010	43 .008	475 .009	1020 .009	0 .0	0 .0	0 .0	0 .0
618	15444 .003	886 .002	26 .005	1 .004	2 .006	29 .005	165 .003	298 .003	4 .035	0 .0	0 .0	0 .0

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
616	15444	.003	5247	.014	47	.010	2	.008	3	.010	52	.010	924	.017	1590	.015	0	.0	0	.0	0	.0	0	.0
617	15444	.003	6502	.018	46	.010	2	.008	2	.006	51	.009	1036	.019	1675	.015	0	.0	0	.0	0	.0	0	.0
618	15444	.003	5831	.016	43	.009	2	.008	2	.006	48	.009	700	.013	1579	.014	0	.0	0	.0	0	.0	0	.0
619	15444	.003	1237	.003	37	.008	2	.008	2	.006	42	.008	297	.005	381	.003	0	.0	0	.0	0	.0	0	.0
633	15444	.003	3363	.009	7	.001	1	.004	1	.003	8	.001	429	.008	1010	.009	0	.0	0	.0	0	.0	0	.0
634	15444	.003	6411	.018	28	.006	2	.008	2	.006	32	.006	1188	.022	1686	.017	0	.0	0	.0	0	.0	0	.0
635	15444	.003	4339	.012	37	.008	2	.008	2	.006	40	.007	832	.015	1375	.013	0	.0	0	.0	0	.0	0	.0
636	15444	.003	4000	.011	241	.050	13	.052	16	.052	269	.050	779	.014	1241	.011	0	.0	0	.0	0	.0	0	.0
650	15444	.003	2099	.006	4	.001	0	.0	0	.0	4	.001	264	.005	652	.006	0	.0	0	.0	0	.0	0	.0
651	15444	.003	9872	.027	99	.021	5	.020	6	.019	110	.020	990	.018	3482	.032	0	.0	0	.0	0	.0	0	.0
652	15444	.003	7073	.019	110	.023	5	.020	7	.023	122	.023	726	.013	2468	.023	0	.0	0	.0	0	.0	0	.0
653	15444	.003	3031	.008	73	.015	4	.016	5	.016	82	.015	317	.006	653	.008	0	.0	0	.0	0	.0	0	.0
668	15444	.003	277	.001	6	.001	0	.0	0	.0	7	.001	26	.000	90	.001	0	.0	0	.0	0	.0	0	.0
669	15444	.003	2292	.006	55	.011	3	.012	4	.013	61	.011	218	.004	595	.005	0	.0	0	.0	0	.0	0	.0
670	15444	.003	2896	.008	58	.012	3	.012	4	.013	64	.012	251	.005	774	.007	0	.0	0	.0	0	.0	0	.0
686	15444	.003	491	.001	8	.002	0	.0	1	.003	9	.002	33	.001	161	.001	0	.0	0	.0	0	.0	0	.0
687	15444	.003	2653	.007	42	.009	2	.008	3	.010	47	.009	178	.003	860	.008	0	.0	0	.0	0	.0	0	.0
704	15444	.003	498	.001	7	.001	0	.0	0	.0	7	.001	33	.001	135	.001	0	.0	0	.0	0	.0	0	.0
TOTAL	5948940		365587		4821		259		308		5381		54072		109311		114		90		102		100	

***EXECUTION TERMINATING NORMALLY. 118 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		ALLOC	COMM EMP	ALLOC	MFG EMP	ALLOC	AGRI EMP	ALLOC	CONS EMP	ALLOC	RAILROAD	ALLOC	REC VSLS	ALLOC	UNPV RDS	ALLOC	UNPV AIR	ALLOC		ALLOC		ALLOC
	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP	$	PROP
128	554	.005	143	.002	386	.015	0	.0	23	.004	10	.014	0	.0	2645	.098	0	.0	0	.0	0	.0
129	163	.001	72	.001	84	.003	0	.0	6	.001	30	.042	0	.0	2645	.098	0	.0	0	.0	0	.0
149	729	.006	305	.003	411	.016	0	.0	13	.002	0	.0	4	.053	2645	.098	0	.0	0	.0	0	.0
150	2094	.017	386	.003	1782	.068	1	.002	7	.001	35	.049	4	.053	2645	.098	0	.0	0	.0	0	.0
151	4122	.034	2929	.032	979	.037	10	.023	205	.036	45	.063	4	.053	2645	.098	0	.0	0	.0	0	.0
152	906	.007	810	.009	70	.003	1	.002	25	.004	0	.0	0	.0	2645	.098	0	.0	0	.0	0	.0
153	286	.002	269	.003	8	.000	1	.002	8	.001	0	.0	0	.0	2645	.098	0	.0	0	.0	0	.0
172	2577	.021	1726	.019	668	.025	7	.016	178	.031	20	.028	4	.053	2645	.098	0	.0	0	.0	0	.0
173	6418	.052	3208	.036	2791	.106	8	.018	409	.072	35	.049	4	.053	2645	.098	0	.0	0	.0	0	.0
174	2034	.017	1074	.012	914	.035	2	.005	45	.008	20	.028	0	.0	2645	.098	0	.0	0	.0	0	.0
175	636	.005	555	.006	65	.002	7	.016	11	.002	30	.042	0	.0	0	.0	0	.0	0	.0	0	.0
176	555	.005	506	.006	29	.001	2	.005	16	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
177	512	.004	487	.005	10	.000	3	.007	12	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
196	6936	.057	6012	.067	669	.026	14	.032	237	.042	10	.014	4	.053	0	.0	0	.0	0	.0	0	.0
197	2858	.023	2142	.024	541	.021	2	.005	172	.030	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
198	669	.005	468	.005	147	.006	1	.002	53	.009	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
199	217	.002	194	.002	15	.001	1	.002	6	.001	35	.049	0	.0	0	.0	0	.0	0	.0	0	.0
200	3743	.031	3715	.041	13	.000	4	.009	12	.002	10	.014	0	.0	0	.0	0	.0	0	.0	0	.0
201	7340	.060	7311	.081	8	.000	7	.016	14	.002	50	.070	0	.0	0	.0	0	.0	0	.0	0	.0
202	2285	.019	2274	.025	3	.000	1	.002	7	.001	10	.014	0	.0	0	.0	0	.0	0	.0	0	.0
221	1269	.010	960	.011	160	.006	8	.018	140	.025	0	.0	4	.053	0	.0	0	.0	0	.0	0	.0
222	1766	.014	967	.011	570	.022	3	.007	226	.040	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
223	6256	.051	4794	.053	1324	.050	3	.007	137	.024	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
224	237	.002	215	.002	12	.000	2	.005	8	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
225	6326	.052	6271	.070	30	.001	8	.018	17	.003	30	.042	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR				
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
226	4083 .033	4061 .045	9 .000	2 .005	11 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
227	2319 .019	2308 .026	2 .000	0 .0	8 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
246	1665 .014	941 .010	610 .023	11 .025	100 .018	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
247	1834 .015	1375 .015	331 .013	3 .007	125 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
248	1291 .011	989 .011	244 .009	4 .009	54 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
249	350 .003	274 .003	39 .001	5 .011	29 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
250	400 .003	321 .004	41 .002	4 .009	29 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
251	292 .002	253 .003	15 .001	3 .007	19 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
252	426 .003	404 .004	2 .000	1 .002	18 .003	0 .0	4 .053	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
253	247 .002	233 .003	1 .000	1 .002	11 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
272	1035 .008	773 .009	74 .003	8 .018	178 .031	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
273	819 .007	502 .006	262 .010	6 .014	48 .008	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
274	394 .003	254 .003	108 .004	4 .009	28 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
275	205 .002	145 .002	35 .001	3 .007	22 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
276	220 .002	161 .002	34 .001	3 .007	22 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
277	294 .002	241 .003	25 .001	3 .007	24 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
278	189 .002	170 .002	4 .000	2 .005	12 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
279	154 .001	139 .002	4 .000	1 .002	9 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
299	588 .005	466 .005	31 .001	6 .014	86 .015	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
300	844 .007	551 .006	214 .008	5 .011	75 .013	0 .0	4 .053	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
301	638 .005	421 .005	155 .006	4 .009	58 .010	0 .0	4 .053	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
302	96 .001	69 .001	16 .001	1 .002	10 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
303	106 .001	83 .001	14 .001	1 .002	8 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
304	93 .001	89 .001	4 .000	1 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
305	93 .001	89 .001	4 .000	1 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC #	PROP	COMM EMP ALLOC #	PROP	MFG EMP ALLOC #	PROP	AGRI EMP ALLOC #	PROP	CONS EMP ALLOC #	PROP	RAILROAD ALLOC #	PROP	REC VSLS ALLOC #	PROP	UNPV RDS ALLOC #	PROP	UNPV AIR ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
306	93	.001	89	.001	4	.000	1	.002	0	.0	40	.056	0	.0	0	.0	0	.0	0	.0	0	.0
326	588	.005	466	.005	31	.001	6	.014	86	.015	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
327	678	.006	394	.004	235	.009	6	.014	43	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
328	230	.002	135	.001	78	.003	2	.005	14	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
329	6	.000	6	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
330	6	.000	6	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
331	59	.000	57	.001	2	.000	0	.0	0	.0	10	.014	0	.0	0	.0	0	.0	0	.0	0	.0
332	93	.001	89	.001	4	.000	1	.002	0	.0	40	.056	0	.0	0	.0	0	.0	0	.0	0	.0
333	93	.001	89	.001	4	.000	1	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
334	56	.000	54	.001	2	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
355	289	.002	221	.002	26	.001	3	.007	39	.007	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
356	194	.002	113	.001	67	.003	2	.005	12	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
357	4	.000	4	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
358	5	.000	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
359	6	.000	6	.000	0	.0	0	.0	0	.0	30	.042	0	.0	0	.0	0	.0	0	.0	0	.0
360	24	.000	23	.000	1	.000	0	.0	0	.0	30	.042	0	.0	0	.0	0	.0	0	.0	0	.0
361	59	.000	56	.001	2	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
362	57	.000	55	.001	2	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
363	62	.001	57	.001	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
386	1	.000	1	.000	0	.0	0	.0	0	.0	0	.0	4	.053	0	.0	0	.0	0	.0	0	.0
387	4	.000	4	.000	0	.0	0	.0	0	.0	30	.042	4	.053	0	.0	0	.0	0	.0	0	.0
388	8	.000	8	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
389	6	.000	6	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
390	6	.000	6	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
391	12	.000	7	.000	4	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV POS	UNPV AIR			
	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP
392	22 .000	12 .000	10 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
410	4 .000	4 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
411	6 .000	6 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
412	5 .000	5 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
413	21 .000	10 .000	10 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
414	26 .000	13 .000	13 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
432	4 .000	4 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
433	5 .000	5 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
434	8 .000	7 .000	2 .000	0 .0	0 .0	0 .0	4 .053	0 .0	0 .0	0 .0	0 .0	0 .0
435	22 .000	12 .000	10 .000	0 .0	0 .0	0 .0	4 .053	0 .0	0 .0	0 .0	0 .0	0 .0
436	26 .000	13 .000	13 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
453	3 .000	3 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
454	18 .000	10 .000	8 .000	0 .0	0 .0	0 .0	4 .053	0 .0	0 .0	0 .0	0 .0	0 .0
455	26 .000	13 .000	13 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
567	288 .002	154 .002	127 .005	2 .005	5 .001	0 .0	4 .053	19 .001	0 .0	0 .0	0 .0	0 .0
568	1175 .010	559 .006	589 .022	3 .007	24 .004	22 .031	0 .0	54 .002	0 .0	0 .0	0 .0	0 .0
583	1134 .009	507 .006	532 .020	0 .0	95 .017	0 .0	4 .053	7 .000	0 .0	0 .0	0 .0	0 .0
584	3733 .030	2640 .029	1008 .038	1 .002	72 .013	28 .039	0 .0	28 .001	0 .0	0 .0	0 .0	0 .0
585	2373 .019	1763 .020	530 .020	3 .007	68 .012	0 .0	0 .0	26 .001	0 .0	0 .0	0 .0	0 .0
598	396 .003	315 .003	39 .001	0 .0	41 .007	0 .0	3 .039	0 .0	0 .0	0 .0	0 .0	0 .0
599	1853 .015	1176 .013	476 .018	0 .0	194 .034	18 .025	4 .053	20 .001	0 .0	0 .0	0 .0	0 .0
600	2193 .018	1126 .012	887 .034	0 .0	178 .031	18 .025	0 .0	23 .001	0 .0	0 .0	0 .0	0 .0
601	1479 .012	995 .011	381 .015	0 .0	100 .018	0 .0	0 .0	13 .000	0 .0	0 .0	0 .0	0 .0
602	700 .006	485 .005	45 .002	0 .0	166 .029	0 .0	0 .0	6 .000	0 .0	0 .0	0 .0	0 .0
615	396 .003	315 .003	39 .001	0 .0	41 .007	0 .0	1 .013	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	ALLOC $ PROP	ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP		ALLOC $ PROP	
616	1345	.011	944	.010	294	.011	5	.011	101	.018	4	.006	0	.0	7	.000	0	.0	0	.0	0	.0
617	1245	.010	1118	.012	79	.003	8	.018	40	.007	0	.0	0	.0	21	.001	0	.0	0	.0	0	.0
618	678	.006	473	.005	166	.006	3	.007	37	.007	0	.0	0	.0	14	.001	0	.0	0	.0	0	.0
619	286	.002	196	.002	37	.001	4	.009	50	.009	0	.0	0	.0	12	.000	0	.0	0	.0	0	.0
633	353	.003	167	.002	170	.006	1	.002	15	.003	10	.014	0	.0	2	.000	0	.0	0	.0	0	.0
634	2124	.017	1128	.013	921	.035	11	.025	65	.011	20	.028	0	.0	8	.000	0	.0	0	.0	0	.0
635	2628	.021	1756	.019	717	.027	53	.121	102	.018	20	.028	0	.0	12	.000	0	.0	0	.0	0	.0
636	4072	.033	1664	.018	2114	.081	54	.123	241	.042	20	.028	0	.0	25	.001	0	.0	0	.0	0	.0
650	164	.001	34	.000	121	.005	0	.0	10	.002	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
651	2793	.023	2058	.023	385	.015	14	.032	335	.059	0	.0	0	.0	2	.000	0	.0	0	.0	0	.0
652	3963	.032	3117	.035	549	.021	54	.123	242	.043	0	.0	0	.0	33	.001	0	.0	0	.0	0	.0
653	1658	.014	963	.011	598	.023	17	.039	80	.014	0	.0	0	.0	63	.002	0	.0	0	.0	0	.0
668	120	.001	73	.001	37	.001	0	.0	10	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
669	1022	.008	512	.006	450	.017	0	.0	60	.011	0	.0	0	.0	27	.001	0	.0	0	.0	0	.0
670	992	.008	512	.006	417	.016	0	.0	62	.011	0	.0	0	.0	54	.002	0	.0	0	.0	0	.0
686	53	.000	38	.000	2	.000	0	.0	12	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
687	296	.002	216	.002	13	.000	3	.007	64	.011	0	.0	0	.0	28	.001	0	.0	0	.0	0	.0
704	75	.001	61	.001	1	.000	1	.002	12	.002	0	.0	0	.0	4	.000	0	.0	0	.0	0	.0
TOTAL	122587		90166		26234		438		5687		719		76		26959		0		0		0	

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
128	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	4	.001
129	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.001
149	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
150	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
151	0	.0	0	.0	0	.0	0	.0	0	.0	20	.016	0	.0	0	.0	4	.001
152	0	.0	0	.0	0	.0	0	.0	0	.0	45	.035	0	.0	0	.0	10	.003
153	0	.0	0	.0	0	.0	0	.0	0	.0	35	.028	0	.0	0	.0	15	.004
172	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
173	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.001
174	0	.0	0	.0	0	.0	0	.0	0	.0	30	.024	0	.0	0	.0	10	.003
175	0	.0	0	.0	0	.0	0	.0	0	.0	50	.039	0	.0	0	.0	3	.001
176	0	.0	0	.0	0	.0	0	.0	0	.0	55	.043	0	.0	0	.0	13	.003
177	0	.0	0	.0	0	.0	0	.0	0	.0	40	.031	0	.0	0	.0	13	.003
196	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
197	0	.0	0	.0	0	.0	0	.0	0	.0	40	.031	0	.0	0	.0	5	.001
198	0	.0	0	.0	0	.0	0	.0	0	.0	60	.047	0	.0	0	.0	7	.002
199	0	.0	0	.0	0	.0	0	.0	0	.0	60	.047	0	.0	0	.0	2	.001
200	0	.0	0	.0	0	.0	0	.0	0	.0	50	.039	0	.0	0	.0	13	.003
201	0	.0	0	.0	0	.0	0	.0	0	.0	40	.031	0	.0	0	.0	12	.003
202	0	.0	0	.0	0	.0	0	.0	0	.0	5	.004	0	.0	0	.0	35	.009
221	0	.0	0	.0	0	.0	0	.0	0	.0	25	.020	0	.0	0	.0	8	.002
222	0	.0	0	.0	0	.0	0	.0	0	.0	35	.028	0	.0	0	.0	45	.011
223	0	.0	0	.0	0	.0	0	.0	0	.0	35	.028	0	.0	0	.0	25	.006
224	0	.0	0	.0	0	.0	0	.0	0	.0	50	.039	0	.0	0	.0	13	.003
225	0	.0	0	.0	0	.0	0	.0	0	.0	30	.024	0	.0	0	.0	8	.002

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
226	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.013
227	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020
246	0	.0	0	.0	0	.0	0	.0	0	.0	60	.047	0	.0	0	.0	0	.0	25	.006
247	0	.0	0	.0	0	.0	0	.0	0	.0	65	.051	0	.0	0	.0	0	.0	8	.002
248	0	.0	0	.0	0	.0	0	.0	0	.0	40	.031	0	.0	0	.0	0	.0	15	.004
249	0	.0	0	.0	0	.0	0	.0	0	.0	55	.043	0	.0	0	.0	0	.0	15	.004
250	0	.0	0	.0	0	.0	0	.0	0	.0	20	.016	0	.0	0	.0	0	.0	20	.005
251	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020
252	0	.0	0	.0	0	.0	0	.0	0	.0	5	.004	0	.0	0	.0	0	.0	60	.015
253	0	.0	0	.0	0	.0	0	.0	0	.0	20	.016	0	.0	0	.0	0	.0	10	.003
272	0	.0	0	.0	0	.0	0	.0	0	.0	65	.051	0	.0	0	.0	0	.0	5	.001
273	0	.0	0	.0	0	.0	0	.0	0	.0	60	.047	0	.0	0	.0	0	.0	15	.004
274	0	.0	0	.0	0	.0	0	.0	0	.0	65	.051	0	.0	0	.0	0	.0	7	.002
275	0	.0	0	.0	0	.0	0	.0	0	.0	10	.008	0	.0	0	.0	0	.0	60	.015
276	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020
277	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020
278	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.018
279	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	90	.023
299	0	.0	0	.0	0	.0	0	.0	0	.0	20	.016	0	.0	0	.0	0	.0	45	.011
300	0	.0	0	.0	0	.0	0	.0	0	.0	5	.004	0	.0	0	.0	0	.0	50	.013
301	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	55	.014
302	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	75	.019
303	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.018
304	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	75	.019
305	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.021

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.									CRP ACRS					FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
306	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
326	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	65	.016
327	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.015
328	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	65	.016
329	0	.0	0	.0	0	.0	0	.0	0	.0	10	.008	0	.0	0	.0	70	.018
330	0	.0	0	.0	0	.0	0	.0	0	.0	20	.016	0	.0	0	.0	65	.016
331	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020
332	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.021
333	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	75	.019
334	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	65	.016
355	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	55	.014
356	0	.0	0	.0	0	.0	0	.0	0	.0	5	.004	0	.0	0	.0	20	.005
357	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.003
358	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.013
359	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	65	.016
360	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.013
361	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.015
362	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.013
363	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	75	.019
386	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	95	.024
387	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.001
388	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.013
389	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	95	.024
390	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.015
391	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.015
	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	CRP ACRS ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	FOR ACRS ALLOC $	PROP
392	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.020
410	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	55	.014
411	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	65	.021
412	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.018
413	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.016
414	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	100	.025
432	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	45	.011
433	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.018
434	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.021
435	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.020
436	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.021
453	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.010
454	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.008
455	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.015
567	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
568	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
583	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
584	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
585	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
598	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
599	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
600	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	6	.002
601	0	.0	0	.0	0	.0	0	.0	0	.0	7	.006	0	.0	0	.0	0	.0	2	.001
602	0	.0	0	.0	0	.0	0	.0	0	.0	10	.008	0	.0	0	.0	0	.0	0	.0
615	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	CRP ACRS ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	FOR ACRS ALLOC $	PROP
616	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
617	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.000
618	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.000
619	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	6	.005	0	.0	0	.0	0	.0
633	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	7	.006	0	.0	0	.0	3	.001
634	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
635	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
636	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
650	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
651	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
652	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
653	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
668	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
669	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002	0	.0	0	.0	0	.0
670	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.004	0	.0	0	.0	3	.001
686	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
687	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.002	0	.0	0	.0	2	.001
704	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	0		0		0		0		0		0		1270		0		0		3960	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
128		0640	522.0	4445.0
129		0640	527.0	4445.0
149		0640	512.0	4440.0
150		0640	517.0	4440.0
151		0640	522.0	4440.0
152		0640	527.0	4440.0
153		0640	532.0	4440.0
172		0640	507.0	4435.0
173		0640	512.0	4435.0
174		0640	517.0	4435.0
175		0640	522.0	4435.0
176		0640	527.0	4435.0
177		0640	532.0	4435.0
196		0640	507.0	4430.0
197		0640	512.0	4430.0
198		0640	517.0	4430.0
199		0640	522.0	4430.0
200		0640	527.0	4430.0
201		0640	532.0	4430.0
202		0640	537.0	4430.0
221		0640	507.0	4425.0
222		0640	512.0	4425.0
223		0640	517.0	4425.0
224		0640	522.0	4425.0
225		0640	527.0	4425.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
226		0640	532.0	4425.0
227		0640	537.0	4425.0
246		0640	507.0	4420.0
247		0640	512.0	4420.0
248		0640	517.0	4420.0
249		0640	522.0	4420.0
250		0640	527.0	4420.0
251		0640	532.0	4420.0
252		0640	537.0	4420.0
253		0640	542.0	4420.0
272		0640	507.0	4415.0
273		0640	512.0	4415.0
274		0640	517.0	4415.0
275		0640	522.0	4415.0
276		0640	527.0	4415.0
277		0640	532.0	4415.0
278		0640	537.0	4415.0
279		0640	542.0	4415.0
299		0640	507.0	4410.0
300		0640	512.0	4410.0
301		0640	517.0	4410.0
302		0640	522.0	4410.0
303		0640	527.0	4410.0
304		0640	532.0	4410.0
305		0640	537.0	4410.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
306	0640	542.0	4410.0
326	0640	507.0	4405.0
327	0640	512.0	4405.0
328	0640	517.0	4405.0
329	0640	522.0	4405.0
330	0640	527.0	4405.0
331	0640	532.0	4405.0
332	0640	537.0	4405.0
333	0640	542.0	4405.0
334	0640	547.0	4405.0
355	0640	507.0	4400.0
356	0640	512.0	4400.0
357	0640	517.0	4400.0
358	0640	522.0	4400.0
359	0640	527.0	4400.0
360	0640	532.0	4400.0
361	0640	537.0	4400.0
362	0640	542.0	4400.0
363	0640	547.0	4400.0
386	0640	517.0	4395.0
387	0640	522.0	4395.0
388	0640	527.0	4395.0
389	0640	532.0	4395.0
390	0640	537.0	4395.0
391	0640	542.0	4395.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
392	0640	547.0	4395.0
410	0640	527.0	4390.0
411	0640	532.0	4390.0
412	0640	537.0	4390.0
413	0640	542.0	4390.0
414	0640	547.0	4390.0
432	0640	527.0	4385.0
433	0640	532.0	4385.0
434	0640	537.0	4385.0
435	0640	542.0	4385.0
436	0640	547.0	4385.0
453	0640	537.0	4380.0
454	0640	542.0	4380.0
455	0640	547.0	4380.0
567	195 0640	502.0	4432.5
568	195 0640	504.5	4432.5
583	194 0640	499.5	4430.0
584	195 0640	502.0	4430.0
585	195 0640	504.5	4430.0
598	218 0640	494.5	4427.5
599	219 0640	497.0	4427.5
600	219 0640	499.5	4427.5
601	220 0640	502.0	4427.5
602	220 0640	504.5	4427.5
615	218 0640	494.5	4425.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
616	219 0640	497.0	4425.0
617	219 0640	499.5	4425.0
618	220 0640	502.0	4425.0
619	220 0640	504.5	4425.0
633	244 0640	497.0	4422.5
634	244 0640	499.5	4422.5
635	245 0640	502.0	4422.5
636	245 0640	504.5	4422.5
650	244 0640	497.0	4420.0
651	244 0640	499.5	4420.0
652	245 0640	502.0	4420.0
653	245 0640	504.5	4420.0
668	270 0640	499.5	4417.5
669	271 0640	502.0	4417.5
670	271 0640	504.5	4417.5
686	271 0640	502.0	4415.0
687	271 0640	504.5	4415.0
704	298 0640	504.5	4412.5

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - CAMDEN COUNTY NJ

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY #

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VHT	MISC	OTHER
	HHHHHH	N#####N	OOOOOO6Q	N##N			O R	JKL	IIIS	QP	O6QN	TU	96 H0

SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN																		HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
299	61776	.029	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
326	61776	.029	1646	.003	9	.002	0	.0	1	.003	10	.002	15	.002	47	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
355	61776	.029	6545	.013	118	.022	6	.022	7	.021	123	.022	106	.012	192	.013	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
356	61776	.029	347	.001	3	.001	0	.0	0	.0	3	.001	11	.001	10	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
357	61776	.029	116	.000	1	.000	0	.0	0	.0	1	.000	4	.000	3	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
382	61776	.029	2878	.006	56	.011	3	.011	4	.012	63	.011	41	.005	87	.006	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
383	61776	.029	2281	.005	28	.006	2	.007	2	.006	31	.006	20	.002	70	.005	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
384	61776	.029	3915	.008	46	.009	3	.011	3	.009	51	.009	101	.011	115	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
385	61776	.029	931	.002	7	.001	0	.0	0	.0	7	.001	24	.003	28	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
386	61776	.029	579	.001	4	.001	0	.0	0	.0	5	.001	19	.002	18	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
387	61776	.029	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
406	61776	.029	173	.000	2	.000	0	.0	0	.0	3	.001	1	.000	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
407	61776	.029	1038	.002	15	.003	1	.004	1	.003	16	.003	9	.001	32	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
408	61776	.029	4035	.008	109	.022	6	.022	7	.021	123	.022	65	.007	86	.006	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
409	61776	.029	3340	.007	69	.014	3	.011	4	.012	78	.014	55	.006	77	.005	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
430	61776	.029	1557	.003	22	.004	1	.004	1	.003	25	.004	13	.001	48	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
431	61776	.029	1259	.003	15	.003	1	.004	1	.003	16	.003	11	.001	39	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
452	61776	.029	173	.000	2	.000	0	.0	0	.0	3	.001	1	.000	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
614	15444	.007	10	.000	0	.0	0	.0	0	.0	0	.0	4	.000	0	.0	4	.068	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
615	15444	.007	982	.002	51	.010	2	.007	3	.009	55	.010	59	.007	31	.002	5	.085	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
616	15444	.007	196	.000	48	.010	2	.007	3	.009	52	.009	37	.004	5	.000	9	.153	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
629	15444	.007	439	.001	0	.0	0	.0	0	.0	0	.0	11	.001	11	.001	3	.051	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
630	15444	.007	3013	.006	6	.001	2	.007	2	.006	6	.001	170	.019	87	.006	8	.136	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
631	15444	.007	9050	.019	22	.004	3	.011	3	.009	25	.004	211	.023	295	.019	4	.068	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
632	15444	.007	10650	.022	124	.025	6	.022	7	.021	136	.024	259	.029	338	.022	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
633	15444	.007	3560	.007	111	.022	6	.022	7	.021	123	.022	85	.009	103	.007	0	.0	0	.0	0	.0
646	15444	.007	1861	.004	26	.005	3	.011	3	.009	30	.005	248	.028	56	.004	7	.119	0	.0	0	.0
647	15444	.007	24592	.051	182	.036	11	.041	12	.036	202	.036	418	.046	773	.050	0	.0	0	.0	0	.0
648	15444	.007	23059	.047	95	.019	5	.019	6	.018	105	.019	322	.036	821	.054	0	.0	0	.0	0	.0
649	15444	.007	13643	.028	123	.024	6	.022	7	.021	135	.024	277	.031	447	.029	0	.0	0	.0	0	.0
650	15444	.007	4228	.009	82	.016	4	.015	5	.015	91	.016	70	.008	130	.008	0	.0	0	.0	0	.0
651	15444	.007	2879	.006	24	.005	1	.004	2	.006	27	.005	37	.004	82	.005	0	.0	0	.0	0	.0
652	15444	.007	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
663	15444	.007	1161	.002	8	.002	2	.007	2	.006	9	.002	129	.014	36	.002	7	.119	0	.0	0	.0
664	15444	.007	21777	.045	132	.026	6	.022	7	.021	144	.026	414	.046	739	.048	0	.0	0	.0	0	.0
665	15444	.007	17989	.037	235	.047	10	.037	14	.042	259	.046	414	.046	673	.044	0	.0	0	.0	0	.0
666	15444	.007	10801	.022	109	.022	5	.019	7	.021	121	.022	166	.018	365	.024	0	.0	0	.0	0	.0
667	15444	.007	7143	.015	102	.020	5	.019	6	.018	113	.020	133	.015	236	.015	0	.0	0	.0	0	.0
668	15444	.007	10971	.023	78	.015	4	.015	5	.015	87	.016	133	.015	323	.021	0	.0	0	.0	0	.0
669	15444	.007	1732	.004	18	.004	1	.004	1	.003	20	.004	18	.002	47	.003	0	.0	0	.0	0	.0
680	15444	.007	21	.000	30	.006	1	.004	2	.006	33	.006	107	.012	0	.0	8	.136	0	.0	0	.0
681	15444	.007	16822	.035	227	.045	12	.044	15	.045	252	.045	333	.037	573	.037	0	.0	0	.0	0	.0
682	15444	.007	14836	.031	119	.024	8	.030	10	.030	132	.024	440	.049	569	.037	0	.0	0	.0	0	.0
683	15444	.007	14772	.030	107	.021	5	.019	7	.021	119	.021	259	.029	530	.035	0	.0	0	.0	0	.0
684	15444	.007	8582	.018	113	.022	5	.019	8	.024	127	.023	181	.020	286	.019	0	.0	0	.0	0	.0
685	15444	.007	7454	.015	185	.037	10	.037	13	.039	208	.037	152	.017	202	.013	0	.0	0	.0	0	.0
686	15444	.007	4600	.009	79	.016	4	.015	5	.015	88	.016	67	.007	114	.007	0	.0	0	.0	0	.0
687	15444	.007	547	.001	2	.000	0	.0	0	.0	2	.000	4	.000	13	.001	0	.0	0	.0	0	.0
697	15444	.007	541	.001	7	.001	1	.004	1	.003	7	.001	30	.003	18	.001	4	.068	0	.0	0	.0
698	15444	.007	11638	.024	243	.048	13	.048	16	.048	272	.049	244	.027	372	.024	0	.0	0	.0	0	.0

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
699	15444	.007	15216	.031	140	.028	9	.033	10	.030	156	.028	366	.041	506	.033	0	.0	0	.0	0	.0	0	.0
700	15444	.007	11829	.024	297	.059	16	.059	20	.061	332	.059	281	.031	396	.026	0	.0	0	.0	0	.0	0	.0
701	15444	.007	7396	.015	78	.015	4	.015	5	.015	88	.016	163	.018	222	.014	0	.0	0	.0	0	.0	0	.0
702	15444	.007	6230	.013	56	.011	3	.011	3	.009	63	.011	122	.014	158	.010	0	.0	0	.0	0	.0	0	.0
703	15444	.007	5333	.011	28	.006	1	.004	2	.006	31	.006	55	.006	128	.008	0	.0	0	.0	0	.0	0	.0
704	15444	.007	3408	.007	11	.002	1	.004	1	.003	13	.002	23	.003	81	.005	0	.0	0	.0	0	.0	0	.0
715	15444	.007	3501	.007	66	.013	3	.011	4	.012	74	.013	48	.005	103	.007	0	.0	0	.0	0	.0	0	.0
716	15444	.007	9429	.019	150	.030	9	.033	10	.030	166	.030	218	.024	290	.019	0	.0	0	.0	0	.0	0	.0
717	15444	.007	12283	.025	99	.020	5	.019	6	.018	109	.019	174	.019	382	.025	0	.0	0	.0	0	.0	0	.0
718	15444	.007	9371	.019	101	.020	5	.019	6	.018	113	.020	158	.018	282	.018	0	.0	0	.0	0	.0	0	.0
719	15444	.007	4998	.010	32	.006	2	.007	2	.006	35	.006	70	.008	133	.009	0	.0	0	.0	0	.0	0	.0
720	15444	.007	3919	.008	13	.003	1	.004	1	.003	15	.003	30	.003	102	.007	0	.0	0	.0	0	.0	0	.0
721	15444	.007	2562	.005	6	.001	0	.0	0	.0	7	.001	15	.002	73	.005	0	.0	0	.0	0	.0	0	.0
733	15444	.007	7513	.015	35	.007	1	.004	2	.006	38	.007	74	.008	247	.016	0	.0	0	.0	0	.0	0	.0
734	15444	.007	6899	.014	32	.006	2	.007	3	.009	36	.006	87	.010	194	.013	0	.0	0	.0	0	.0	0	.0
735	15444	.007	12190	.025	58	.012	4	.015	5	.015	63	.011	255	.028	363	.024	0	.0	0	.0	0	.0	0	.0
736	15444	.007	7162	.015	40	.008	2	.007	2	.006	44	.008	100	.011	223	.015	0	.0	0	.0	0	.0	0	.0
737	15444	.007	3051	.006	33	.007	2	.007	2	.006	38	.007	69	.008	84	.005	0	.0	0	.0	0	.0	0	.0
738	15444	.007	2434	.005	6	.001	0	.0	0	.0	6	.001	14	.002	69	.005	0	.0	0	.0	0	.0	0	.0
750	15444	.007	4143	.009	56	.011	3	.011	4	.012	62	.011	37	.004	138	.009	0	.0	0	.0	0	.0	0	.0
751	15444	.007	5035	.010	71	.014	4	.015	5	.015	80	.014	44	.005	160	.010	0	.0	0	.0	0	.0	0	.0
752	15444	.007	11248	.023	47	.009	3	.011	3	.009	53	.009	118	.013	354	.023	0	.0	0	.0	0	.0	0	.0
753	15444	.007	13283	.027	57	.011	3	.011	3	.009	64	.011	129	.014	435	.028	0	.0	0	.0	0	.0	0	.0
754	15444	.007	6958	.014	34	.007	2	.007	2	.006	38	.007	68	.008	215	.014	0	.0	0	.0	0	.0	0	.0
755	15444	.007	4523	.009	31	.006	2	.007	2	.006	35	.006	46	.005	128	.008	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
767	15444	.007	1708	.004	20	.004	1	.004	1	.003	22	.004	70	.008	14	.001	0	.0	0	.0	0	.0	0	.0
768	15444	.007	3058	.006	37	.007	2	.007	2	.006	42	.007	26	.003	65	.006	0	.0	0	.0	0	.0	0	.0
769	15444	.007	3782	.008	38	.008	2	.007	2	.006	43	.008	30	.003	108	.007	0	.0	0	.0	0	.0	0	.0
770	15444	.007	3984	.008	12	.002	1	.004	1	.003	13	.002	37	.004	122	.008	0	.0	0	.0	0	.0	0	.0
771	15444	.007	4481	.009	25	.005	1	.004	1	.003	28	.005	45	.005	135	.009	0	.0	0	.0	0	.0	0	.0
772	15444	.007	3783	.008	63	.013	3	.011	4	.012	70	.012	49	.005	108	.007	0	.0	0	.0	2	.095	1	.100
785	15444	.007	696	.001	11	.002	1	.004	1	.003	12	.002	7	.001	20	.001	0	.0	0	.0	19	.905	9	.900
786	15444	.007	1187	.002	26	.005	1	.004	2	.006	29	.005	20	.002	35	.002	0	.0	0	.0	0	.0	0	.0
787	15444	.007	988	.002	24	.005	1	.004	2	.006	26	.005	19	.002	29	.002	0	.0	0	.0	0	.0	0	.0
788	15444	.007	1241	.003	9	.002	1	.004	1	.003	10	.002	13	.001	37	.002	0	.0	0	.0	0	.0	0	.0
789	15444	.007	1032	.002	7	.001	0	.0	0	.0	8	.001	10	.001	31	.002	0	.0	0	.0	0	.0	0	.0
TOTAL	2162160		486128		5035		270		330		5600		9018		15327		59		0		21		10	

***EXECUTION TERMINATING NORMALLY. 86 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
299	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
326	211 .001	163 .001	14 .000	0 .0	34 .003	0 .0	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
355	1556 .009	798 .007	330 .008	12 .042	415 .037	50 .068	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
356	18 .000	11 .000	5 .000	0 .0	1 .000	0 .0	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
357	6 .000	4 .000	2 .000	0 .0	0 .0	0 .0	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
382	628 .004	242 .002	257 .006	1 .003	126 .011	0 .0	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
383	413 .012	119 .001	273 .006	1 .003	16 .001	10 .014	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
384	347 .002	185 .002	148 .003	1 .003	11 .001	40 .054	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
385	70 .000	41 .000	25 .001	0 .0	3 .000	20 .027	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
386	30 .000	19 .000	9 .000	0 .0	2 .000	30 .041	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
387	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
406	33 .000	8 .000	24 .001	0 .0	1 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
407	280 .001	46 .000	144 .003	1 .003	8 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
408	484 .002	135 .001	249 .006	1 .003	15 .001	30 .041	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
409	298 .002	161 .001	124 .003	1 .003	9 .001	60 .082	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
430	300 .002	69 .001	216 .005	1 .003	13 .001	30 .041	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
431	224 .001	69 .001	144 .003	1 .003	9 .001	20 .027	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
452	33 .000	8 .000	24 .001	0 .0	1 .000	5 .007	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
614	67 .000	6 .000	60 .001	0 .0	1 .000	5 .007	2 .050	0 .0	0 .0	0 .0	0 .0	0 .0
615	3574 .021	1832 .016	1478 .034	0 .0	264 .024	15 .020	2 .050	44 .013	0 .0	0 .0	0 .0	0 .0
616	3466 .021	1554 .014	1575 .036	1 .003	335 .030	0 .0	4 .100	44 .013	0 .0	0 .0	0 .0	0 .0
629	97 .001	47 .000	44 .001	0 .0	5 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
630	929 .006	510 .005	381 .009	0 .0	37 .003	6 .008	2 .050	57 .017	0 .0	0 .0	0 .0	0 .0
631	2095 .013	782 .007	1092 .025	1 .003	221 .020	10 .014	4 .100	86 .025	0 .0	0 .0	0 .0	0 .0
632	7910 .047	4294 .038	2785 .064	8 .028	822 .073	15 .020	0 .0	76 .022	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.		COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
633	3448	.021	2123	.019	857	.020	9	.031	459	.041	0	.0	0	.0	44	.013	0	.0	0	.0	0	.0
646	8176	.049	2070	.018	6088	.140	0	.0	18	.002	6	.008	2	.050	19	.006	0	.0	0	.0	0	.0
647	19691	.118	14544	.130	4687	.108	3	.010	456	.041	8	.011	0	.0	94	.028	0	.0	0	.0	0	.0
648	5627	.034	4430	.039	877	.020	5	.017	315	.028	15	.020	0	.0	86	.025	0	.0	0	.0	0	.0
649	6916	.041	5282	.047	1173	.027	4	.014	458	.041	20	.027	0	.0	45	.013	0	.0	0	.0	0	.0
650	6306	.038	4700	.042	1259	.029	4	.014	342	.031	10	.014	0	.0	24	.007	0	.0	0	.0	0	.0
651	293	.002	259	.002	4	.000	1	.003	30	.003	0	.0	0	.0	12	.004	0	.0	0	.0	0	.0
652	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
663	1274	.008	520	.005	744	.017	0	.0	9	.001	0	.0	2	.050	0	.0	0	.0	0	.0	0	.0
664	8113	.049	4855	.043	2950	.068	1	.003	304	.027	30	.041	0	.0	96	.028	0	.0	0	.0	0	.0
665	8656	.052	6405	.057	1752	.040	12	.042	489	.044	22	.030	1	.025	10	.003	0	.0	0	.0	0	.0
666	6534	.039	4934	.044	1342	.031	4	.014	253	.023	10	.014	1	.025	11	.003	0	.0	0	.0	0	.0
667	7314	.044	6309	.056	595	.014	1	.003	410	.037	0	.0	0	.0	21	.006	0	.0	0	.0	0	.0
668	2885	.017	2599	.023	119	.003	0	.0	168	.015	0	.0	0	.0	24	.007	0	.0	0	.0	0	.0
669	635	.004	385	.003	287	.005	1	.003	42	.004	0	.0	0	.0	12	.004	0	.0	0	.0	0	.0
680	466	.003	150	.001	317	.007	0	.0	0	.0	0	.0	2	.050	4	.001	0	.0	0	.0	0	.0
681	3121	.019	1873	.017	1136	.026	0	.0	113	.010	20	.027	0	.0	34	.010	0	.0	0	.0	0	.0
682	3775	.023	3241	.029	302	.007	6	.021	228	.020	22	.030	1	.025	37	.011	0	.0	0	.0	0	.0
683	3012	.018	2344	.021	266	.006	118	.413	283	.025	16	.022	1	.025	8	.002	0	.0	0	.0	0	.0
684	3691	.022	3163	.028	175	.004	6	.021	348	.031	0	.0	0	.0	18	.005	0	.0	0	.0	0	.0
685	1894	.011	1206	.011	326	.008	5	.017	358	.032	0	.0	0	.0	24	.007	0	.0	0	.0	0	.0
686	2722	.016	1179	.011	1309	.030	4	.014	229	.020	0	.0	0	.0	24	.007	0	.0	0	.0	0	.0
687	42	.000	34	.000	3	.000	0	.0	4	.000	0	.0	0	.0	7	.002	0	.0	0	.0	0	.0
697	408	.002	215	.002	189	.004	0	.0	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
698	1257	.011	1199	.011	446	.010	1	.003	163	.015	0	.0	0	.0	15	.004	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP
699	2650 .017	2537 .023	128 .003	2 .007	181 .016	0 .0	0 .0	24 .007	0 .0	0 .0	0 .0	0 .0
700	3669 .022	1855 .017	1522 .035	11 .038	279 .025	28 .027	0 .0	2 .001	0 .0	0 .0	0 .0	0 .0
701	2291 .014	1830 .016	213 .005	18 .063	229 .020	22 .030	0 .0	919 .272	0 .0	0 .0	0 .0	0 .0
702	1258 .008	834 .007	272 .006	4 .014	147 .013	0 .0	0 .0	24 .007	0 .0	0 .0	0 .0	0 .0
703	637 .004	400 .004	159 .004	0 .0	78 .007	0 .0	0 .0	42 .012	0 .0	0 .0	0 .0	0 .0
704	278 .002	226 .002	22 .001	0 .0	30 .003	0 .0	0 .0	12 .004	0 .0	0 .0	0 .0	0 .0
715	403 .002	156 .001	163 .004	0 .0	83 .007	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
716	2490 .015	1769 .016	597 .014	2 .007	121 .011	0 .0	0 .0	9 .003	0 .0	0 .0	0 .0	0 .0
717	2265 .014	1454 .013	658 .015	2 .007	149 .013	10 .014	0 .0	11 .003	0 .0	0 .0	0 .0	0 .0
718	1569 .009	1209 .011	166 .004	3 .010	190 .017	28 .038	0 .0	54 .016	0 .0	0 .0	0 .0	0 .0
719	1069 .006	797 .007	127 .003	1 .003	143 .013	0 .0	0 .0	73 .022	0 .0	0 .0	0 .0	0 .0
720	544 .003	441 .004	31 .001	0 .0	72 .006	0 .0	0 .0	55 .016	0 .0	0 .0	0 .0	0 .0
721	489 .003	408 .004	19 .000	0 .0	70 .006	0 .0	0 .0	91 .027	0 .0	0 .0	0 .0	0 .0
733	541 .003	262 .002	126 .003	0 .0	152 .014	0 .0	0 .0	12 .004	0 .0	0 .0	0 .0	0 .0
734	565 .003	294 .003	138 .003	0 .0	133 .012	0 .0	0 .0	17 .005	0 .0	0 .0	0 .0	0 .0
735	1749 .010	1536 .014	85 .002	4 .014	124 .011	18 .024	0 .0	9 .003	0 .0	0 .0	0 .0	0 .0
736	1401 .008	1223 .011	63 .001	3 .010	112 .010	21 .029	0 .0	75 .022	0 .0	0 .0	0 .0	0 .0
737	502 .003	313 .003	123 .003	2 .007	66 .006	0 .0	0 .0	56 .017	0 .0	0 .0	0 .0	0 .0
738	465 .003	380 .003	18 .000	0 .0	66 .006	0 .0	0 .0	58 .017	0 .0	0 .0	0 .0	0 .0
750	684 .004	312 .003	276 .006	0 .0	96 .009	0 .0	0 .0	8 .002	0 .0	0 .0	0 .0	0 .0
751	1015 .006	611 .005	293 .007	1 .003	109 .010	0 .0	0 .0	17 .005	0 .0	0 .0	0 .0	0 .0
752	792 .005	647 .006	42 .001	2 .007	102 .009	0 .0	0 .0	22 .007	0 .0	0 .0	0 .0	0 .0
753	1492 .009	1331 .012	105 .002	6 .021	52 .005	21 .029	4 .100	88 .026	0 .0	0 .0	0 .0	0 .0
754	1184 .007	937 .008	191 .004	2 .007	55 .005	14 .019	4 .100	110 .033	0 .0	0 .0	0 .0	0 .0
755	611 .004	428 .004	97 .002	0 .0	87 .008	6 .008	0 .0	36 .011	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
767	1109 .007	1093 .010	9 .000	0 .0	7 .001	0 .0	0 .0	9 .003	0 .0	0 .0	0 .0	0 .0
768	794 .005	699 .006	51 .001	1 .003	43 .004	0 .0	0 .0	12 .004	0 .0	0 .0	0 .0	0 .0
769	779 .005	678 .006	53 .001	2 .007	46 .004	0 .0	2 .050	17 .005	0 .0	0 .0	0 .0	0 .0
770	392 .002	348 .003	26 .001	2 .007	15 .001	0 .0	2 .050	23 .007	0 .0	0 .0	0 .0	0 .0
771	754 .005	513 .005	201 .005	2 .007	37 .003	28 .038	2 .050	21 .006	0 .0	0 .0	0 .0	0 .0
772	1779 .011	964 .009	717 .017	1 .003	97 .009	4 .005	0 .0	14 .004	0 .0	0 .0	0 .0	0 .0
785	178 .001	130 .001	18 .000	0 .0	22 .002	0 .0	0 .0	3 .001	0 .0	0 .0	0 .0	0 .0
786	286 .002	158 .001	52 .001	0 .0	75 .007	0 .0	0 .0	17 .005	0 .0	0 .0	0 .0	0 .0
787	236 .001	116 .001	49 .001	0 .0	72 .006	0 .0	0 .0	19 .006	0 .0	0 .0	0 .0	0 .0
788	132 .001	71 .001	40 .001	0 .0	20 .002	2 .003	0 .0	14 .004	0 .0	0 .0	0 .0	0 .0
789	154 .001	78 .001	70 .002	0 .0	5 .000	16 .022	2 .050	14 .004	0 .0	0 .0	0 .0	0 .0
TOTAL	167113	112152	43446	286	11198	735	40	3383	0	0	0	0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	CRP ACRS ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	FOR ACRS ALLOC $	PROP
299	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
326	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.019
355	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.043	0	.0	0	.0	50	.064
356	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.043	0	.0	0	.0	45	.058
357	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.090
382	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.064	0	.0	0	.0	25	.032
383	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.043	0	.0	0	.0	40	.051
384	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.064	0	.0	0	.0	35	.045
385	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.107	0	.0	0	.0	40	.051
386	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.043	0	.0	0	.0	55	.071
387	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
406	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
407	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.013
408	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.107	0	.0	0	.0	30	.039
409	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.107	0	.0	0	.0	55	.071
430	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.064	0	.0	0	.0	35	.045
431	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.043	0	.0	0	.0	30	.039
432	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.006
614	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
615	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
616	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
629	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
630	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
631	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
632	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

360

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP
633	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
646	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
647	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
648	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
649	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
650	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
651	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
652	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
663	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
664	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
665	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
666	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
667	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
668	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	2 .003
669	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
680	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	2 .009	0 .0	0 .0	0 .0	3 .004
681	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
682	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
683	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
684	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
685	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
686	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	3 .004
687	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	3 .013	0 .0	0 .0	0 .0	2 .003
697	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
698	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
699	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
700	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
701	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
702	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
703	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0
704	0	.0	0	.0	0	.0	0	.0	0	.0	4	.017	0	.0	0	.0	2	.003
715	0	.0	0	.0	0	.0	0	.0	0	.0	4	.017	0	.0	0	.0	7	.009
716	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	8	.010
717	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
718	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
719	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
720	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
721	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	3	.004
733	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	20	.026
734	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.032
735	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.006
736	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	5	.006
737	0	.0	0	.0	0	.0	0	.0	0	.0	1	.004	0	.0	0	.0	0	.0
738	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	2	.003
750	0	.0	0	.0	0	.0	0	.0	0	.0	1	.004	0	.0	0	.0	8	.010
751	0	.0	0	.0	0	.0	0	.0	0	.0	1	.004	0	.0	0	.0	20	.026
752	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
753	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0
754	0	.0	0	.0	0	.0	0	.0	0	.0	5	.021	0	.0	0	.0	3	.004
755	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	0	.0
											2	.009	0	.0	0	.0	6	.008
											1	.004	0	.0	0	.0	6	.008

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
767	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
768	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	0	.0	0	.0
769	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.004	0	.0	0	.0	0	.0	20	.026
770	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0	10	.013
771	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0	10	.013
772	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0	5	.006
785	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.009	0	.0	0	.0	0	.0	8	.010
786	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0	15	.019
787	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0	15	.019
788	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.004	0	.0	0	.0	0	.0	15	.019
789	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.013	0	.0	0	.0	0	.0	10	.013
TOTAL	0		0		0		0		0		0		234		0		0		0		770	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
299		0740	507.0	4410.0
326		0740	507.0	4405.0
355		0740	507.0	4400.0
356		0740	512.0	4400.0
357		0740	517.0	4400.0
382		0740	497.0	4395.0
383		0740	502.0	4395.0
384		0740	507.0	4395.0
385		0740	512.0	4395.0
386		0740	517.0	4395.0
387		0740	522.0	4395.0
406		0740	497.0	4390.0
407		0740	502.0	4390.0
408		0740	507.0	4390.0
409		0740	512.0	4390.0
430		0740	507.0	4385.0
431		0740	512.0	4385.0
452		0740	507.0	4380.0
614	218	0740	492.0	4425.0
615	218	0740	494.5	4425.0
616	219	0740	497.0	4425.0
629	242	0740	487.0	4422.5
630	242	0740	489.5	4422.5
631	243	0740	492.0	4422.5
632	243	0740	494.5	4422.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
633	244 0740	497.0	4422.5
646	242 0740	487.0	4420.0
647	242 0740	489.5	4420.0
648	243 0740	492.0	4420.0
649	243 0740	494.5	4420.0
650	244 0740	497.0	4420.0
651	244 0740	499.5	4420.0
652	245 0740	502.0	4420.0
663	268 0740	487.0	4417.5
664	268 0740	489.5	4417.5
665	269 0740	492.0	4417.5
666	269 0740	494.5	4417.5
667	270 0740	497.0	4417.5
668	270 0740	499.5	4417.5
669	271 0740	504.5	4417.5
680	268 0740	487.0	4415.0
681	268 0740	489.5	4415.0
682	269 0740	492.0	4415.0
683	269 0740	494.5	4415.0
684	270 0740	497.0	4415.0
685	270 0740	499.5	4415.0
686	271 0740	502.0	4415.0
687	271 0740	504.5	4415.0
697	295 0740	487.0	4412.5
698	295 0740	489.5	4412.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTH LOCATION (KM) E	N
699	296 0740	492.0	4412.5
700	296 0740	494.5	4412.5
701	297 0740	497.0	4412.5
702	297 0740	499.5	4412.5
703	298 0740	502.0	4412.5
704	298 0740	504.5	4412.5
715	295 0740	489.5	4410.0
716	296 0740	492.0	4410.0
717	296 0740	494.5	4410.0
718	297 0740	497.0	4410.0
719	297 0740	499.5	4410.0
720	298 0740	502.0	4410.0
721	298 0740	504.5	4410.0
733	323 0740	492.0	4407.5
734	323 0740	494.5	4407.5
735	324 0740	497.0	4407.5
736	324 0740	499.5	4407.5
737	325 0740	502.0	4407.5
738	325 0740	504.5	4407.5
750	323 0740	492.0	4405.0
751	323 0740	494.5	4405.0
752	324 0740	497.0	4405.0
753	324 0740	499.5	4405.0
754	325 0740	502.0	4405.0
755	325 0740	504.5	4405.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
767	352 0740	492.0	4402.5
768	352 0740	494.5	4402.5
769	353 0740	497.0	4402.5
770	353 0740	499.5	4402.5
771	354 0740	502.0	4402.5
772	354 0740	504.5	4402.5
785	352 0740	494.5	4400.0
786	353 0740	497.0	4400.0
787	353 0740	499.5	4400.0
788	354 0740	502.0	4400.0
789	354 0740	504.5	4400.0

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - CHESTER COUNTY PA

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VHT	MISC	OTHER
	HHHHHH	HHHHHH	0000006Q				O R	JKL	IIIS	QP	06QH	TU	06 HR

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN								HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
88	61776	.010	2092	.007	5	.001	1	.005	1	.004	7	.002	979	.006	712	.008	0	.0	0	.0	0	.0
89	61776	.010	5624	.019	65	.017	4	.019	5	.020	74	.017	2689	.016	1925	.021	0	.0	0	.0	0	.0
90	61776	.010	1671	.006	20	.005	1	.005	1	.004	22	.005	747	.004	524	.006	0	.0	0	.0	0	.0
91	61776	.010	455	.002	5	.001	0	.0	0	.0	4	.001	498	.003	0	.0	0	.0	0	.0	0	.0
109	61776	.010	594	.002	17	.004	1	.005	1	.004	19	.004	1428	.009	185	.002	0	.0	0	.0	0	.0
110	61776	.010	674	.002	5	.001	0	.0	0	.0	6	.001	747	.004	215	.002	0	.0	0	.0	0	.0
111	61776	.010	824	.003	21	.006	1	.005	1	.004	24	.006	1096	.007	261	.003	0	.0	0	.0	0	.0
112	61776	.010	1859	.006	36	.010	2	.009	2	.008	40	.009	1544	.009	591	.007	0	.0	0	.0	0	.0
113	61776	.010	2480	.008	21	.006	1	.005	1	.004	23	.005	1245	.007	761	.008	0	.0	0	.0	0	.0
114	61776	.010	6129	.020	66	.017	3	.014	3	.012	73	.017	3403	.020	1788	.020	0	.0	0	.0	0	.0
115	61776	.010	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
131	61776	.010	686	.003	7	.002	0	.0	0	.0	8	.002	448	.003	252	.003	0	.0	0	.0	0	.0
132	61776	.010	900	.003	58	.015	3	.014	4	.016	65	.015	1444	.009	240	.003	0	.0	0	.0	0	.0
133	61776	.010	574	.002	14	.004	1	.005	1	.004	16	.004	847	.005	175	.002	0	.0	0	.0	0	.0
134	61776	.010	716	.002	12	.003	1	.005	1	.004	14	.003	1029	.006	230	.003	0	.0	0	.0	0	.0
135	61776	.010	953	.003	12	.003	1	.005	1	.004	14	.003	880	.005	296	.003	0	.0	0	.0	0	.0
136	61776	.010	1998	.007	15	.004	1	.005	1	.004	16	.004	1096	.007	600	.007	0	.0	0	.0	0	.0
137	61776	.010	17836	.059	122	.032	7	.033	8	.032	136	.032	9130	.054	5852	.065	0	.0	0	.0	0	.0
138	61776	.010	1425	.005	16	.004	1	.005	1	.004	18	.004	498	.003	425	.005	0	.0	0	.0	0	.0
154	61776	.010	922	.003	9	.002	0	.0	0	.0	10	.002	664	.004	277	.003	0	.0	0	.0	0	.0
155	61776	.010	2138	.007	27	.007	1	.005	1	.004	29	.007	1909	.011	665	.007	0	.0	0	.0	0	.0
156	61776	.010	1647	.005	48	.013	3	.014	3	.012	54	.013	1328	.008	460	.005	0	.0	0	.0	0	.0
157	61776	.010	1411	.005	10	.003	1	.005	1	.004	11	.003	1311	.008	381	.004	0	.0	0	.0	0	.0
158	61776	.010	1142	.004	78	.021	5	.024	6	.024	88	.021	1328	.008	333	.004	0	.0	0	.0	0	.0
159	61776	.010	2308	.008	39	.010	2	.009	3	.012	44	.010	1494	.009	679	.008	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP
160	61776	.010	1927	.006	89	.024	5	.024	7	.028	100	.024	1693	.010	583	.006	0	.0	0	.0	0	.0	0	.0
161	61776	.010	2443	.008	140	.037	8	.038	10	.040	159	.037	1496	.009	708	.008	0	.0	0	.0	0	.0	0	.0
162	61776	.010	3877	.013	65	.017	3	.014	4	.016	74	.017	1527	.009	1109	.012	0	.0	0	.0	0	.0	0	.0
164	61776	.010	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
178	61776	.010	448	.001	3	.001	0	.0	0	.0	3	.001	216	.001	131	.001	0	.0	0	.0	0	.0	0	.0
179	61776	.010	1551	.005	9	.002	0	.0	0	.0	9	.002	747	.004	455	.005	0	.0	0	.0	0	.0	0	.0
180	61776	.010	1781	.006	26	.007	1	.005	1	.004	29	.007	946	.006	540	.006	0	.0	0	.0	0	.0	0	.0
181	61776	.010	2369	.008	19	.005	1	.005	1	.004	21	.005	1228	.007	683	.008	0	.0	0	.0	0	.0	0	.0
182	61776	.010	3448	.011	44	.012	3	.014	3	.012	49	.012	1577	.009	966	.011	0	.0	0	.0	0	.0	0	.0
183	61776	.010	6856	.020	75	.020	4	.019	5	.020	84	.020	1992	.012	1700	.019	0	.0	0	.0	0	.0	0	.0
184	61776	.010	6223	.021	163	.043	10	.047	11	.044	184	.043	2905	.017	1691	.019	0	.0	0	.0	0	.0	0	.0
185	61776	.010	8991	.030	123	.032	7	.033	8	.032	139	.033	4200	.025	2547	.028	0	.0	0	.0	0	.0	0	.0
186	61776	.010	13956	.046	192	.051	9	.042	12	.048	212	.050	6474	.039	4175	.046	0	.0	0	.0	0	.0	0	.0
203	61776	.010	1411	.005	34	.009	2	.009	2	.008	38	.009	1411	.008	447	.005	0	.0	0	.0	0	.0	0	.0
204	61776	.010	2880	.010	33	.009	2	.009	2	.008	37	.009	1494	.009	909	.010	0	.0	19	.576	315	.625	356	.737
205	61776	.010	17154	.057	129	.034	8	.038	9	.036	145	.034	9329	.056	5726	.063	0	.0	2	.061	35	.069	30	.062
206	61776	.010	6327	.021	100	.026	6	.028	6	.024	112	.026	3453	.021	1766	.020	0	.0	1	.030	22	.044	2	.004
207	61776	.010	10713	.036	128	.034	7	.033	8	.032	143	.034	4814	.029	3507	.039	0	.0	1	.030	22	.044	2	.004
208	61776	.010	4616	.015	68	.018	4	.019	5	.020	77	.018	1992	.012	1263	.014	0	.0	0	.0	0	.0	0	.0
209	61776	.010	8781	.029	83	.022	5	.024	6	.024	95	.022	2739	.016	2522	.028	0	.0	0	.0	63	.125	26	.054
210	61776	.010	6332	.021	40	.011	2	.009	3	.012	44	.010	1693	.010	1876	.021	0	.0	0	.0	0	.0	0	.0
211	61776	.010	2447	.008	55	.015	3	.014	3	.012	61	.014	1411	.008	663	.007	0	.0	0	.0	0	.0	0	.0
228	61776	.010	4015	.013	55	.015	3	.014	3	.012	62	.015	4233	.025	1312	.015	0	.0	10	.303	1	.002	0	.0
229	61776	.010	3005	.010	33	.009	2	.009	2	.008	38	.009	1992	.012	970	.011	0	.0	0	.0	0	.0	0	.0
230	61776	.010	3659	.012	26	.007	2	.009	2	.008	29	.007	3685	.022	1106	.012	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN								HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
231	61776	.010	2281	.008	6	.002	1	.005	1	.004	9	.002	1162	.007	679	.008	0	.0	0	.0	10	.020	1	.002
232	61776	.010	1906	.006	12	.003	1	.005	1	.004	14	.003	2407	.014	584	.006	0	.0	0	.0	0	.0	0	.0
233	61776	.010	2439	.008	17	.004	1	.005	1	.004	19	.004	996	.006	724	.008	0	.0	0	.0	0	.0	0	.0
234	61776	.010	31817	.106	183	.048	9	.042	11	.044	205	.048	9794	.058	8945	.099	0	.0	0	.0	0	.0	0	.0
235	61776	.010	7215	.024	78	.018	3	.014	5	.020	78	.018	2208	.013	2130	.024	0	.0	0	.0	0	.0	0	.0
236	61776	.010	400	.001	21	.006	1	.005	1	.004	24	.006	415	.002	121	.001	0	.0	0	.0	0	.0	0	.0
254	61776	.010	1623	.005	12	.003	1	.005	1	.004	14	.003	1361	.008	464	.005	0	.0	0	.0	0	.0	0	.0
255	61776	.010	702	.002	9	.002	1	.005	1	.004	10	.002	996	.006	193	.002	0	.0	0	.0	0	.0	0	.0
256	61776	.010	850	.003	10	.003	1	.005	1	.004	11	.003	1062	.006	252	.003	0	.0	0	.0	0	.0	0	.0
257	61776	.010	1027	.003	5	.001	1	.005	1	.004	6	.001	996	.006	282	.003	0	.0	0	.0	0	.0	0	.0
258	61776	.010	1646	.005	12	.003	1	.005	1	.004	13	.003	1461	.009	435	.005	0	.0	0	.0	0	.0	0	.0
259	61776	.010	2078	.007	51	.013	2	.009	3	.012	56	.013	1826	.011	533	.006	0	.0	0	.0	0	.0	0	.0
260	61776	.010	2334	.008	50	.013	2	.009	3	.012	57	.013	2407	.014	623	.007	0	.0	0	.0	0	.0	0	.0
261	61776	.010	765	.003	22	.006	1	.005	2	.008	25	.006	913	.005	161	.002	0	.0	0	.0	0	.0	0	.0
280	61776	.010	378	.001	5	.001	0	.0	0	.0	6	.001	498	.003	72	.001	0	.0	0	.0	0	.0	0	.0
281	61776	.010	856	.003	10	.003	1	.005	1	.004	12	.003	996	.006	193	.002	0	.0	0	.0	0	.0	0	.0
282	61776	.010	938	.003	19	.005	1	.005	1	.004	21	.005	1594	.010	247	.003	0	.0	0	.0	0	.0	0	.0
283	61776	.010	1379	.005	14	.004	1	.005	1	.004	15	.004	946	.006	391	.004	0	.0	0	.0	0	.0	0	.0
284	61776	.010	1679	.006	11	.003	1	.005	1	.004	12	.003	996	.006	499	.006	0	.0	0	.0	0	.0	0	.0
285	61776	.010	6329	.021	87	.023	4	.019	6	.024	97	.023	3818	.023	2108	.023	0	.0	0	.0	6	.012	13	.027
286	61776	.010	2326	.008	39	.010	2	.009	3	.012	44	.010	1245	.007	702	.008	0	.0	0	.0	0	.0	0	.0
287	61776	.010	861	.003	31	.008	1	.005	2	.008	35	.008	747	.004	233	.003	0	.0	0	.0	0	.0	0	.0
307	61776	.010	2187	.007	24	.006	1	.005	2	.008	27	.006	1112	.007	711	.008	0	.0	0	.0	0	.0	0	.0
308	61776	.010	1837	.006	20	.005	1	.005	1	.004	23	.005	1162	.007	550	.006	0	.0	0	.0	0	.0	0	.0
309	61776	.010	1054	.003	20	.005	1	.005	2	.008	22	.005	1560	.009	285	.003	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
310	61776	.010	3972	.013	55	.015	3	.014	3	.012	61	.014	2656	.016	1221	.014	0	.0	0	.0	6	.012	13	.027
311	61776	.010	3163	.011	53	.014	3	.014	4	.016	60	.014	2573	.015	944	.010	0	.0	0	.0	16	.032	40	.083
312	61776	.010	2761	.009	20	.005	1	.005	1	.004	22	.005	1245	.007	880	.010	0	.0	0	.0	0	.0	0	.0
313	61776	.010	917	.003	10	.003	1	.005	1	.004	12	.003	415	.002	289	.003	0	.0	0	.0	0	.0	0	.0
314	61776	.010	113	.000	4	.001	0	.0	0	.0	5	.001	83	.000	31	.000	0	.0	0	.0	0	.0	0	.0
335	61776	.010	977	.003	9	.002	1	.005	1	.004	10	.002	697	.004	286	.003	0	.0	0	.0	0	.0	0	.0
336	61776	.010	3282	.011	32	.008	2	.009	2	.008	37	.009	1677	.010	1150	.013	0	.0	0	.0	0	.0	0	.0
337	61776	.010	1307	.004	9	.002	1	.005	1	.004	11	.003	813	.005	426	.005	0	.0	0	.0	0	.0	0	.0
338	61776	.010	756	.003	5	.001	1	.005	1	.004	5	.001	1228	.007	216	.002	0	.0	0	.0	3	.006	0	.0
339	61776	.010	813	.003	7	.002	1	.005	1	.004	8	.002	1079	.006	251	.003	0	.0	0	.0	0	.0	0	.0
340	61776	.010	1389	.005	9	.002	1	.005	1	.004	9	.002	1079	.006	413	.005	0	.0	0	.0	0	.0	0	.0
341	61776	.010	219	.001	1	.000	0	.0	0	.0	1	.000	83	.000	65	.001	0	.0	0	.0	0	.0	0	.0
364	61776	.010	866	.003	8	.002	0	.0	0	.0	9	.002	747	.004	245	.003	0	.0	0	.0	0	.0	0	.0
365	61776	.010	1023	.003	7	.002	0	.0	0	.0	8	.002	747	.004	303	.003	0	.0	0	.0	5	.010	0	.0
366	61776	.010	489	.002	3	.001	1	.005	1	.004	4	.001	847	.005	151	.002	0	.0	0	.0	0	.0	0	.0
367	61776	.010	475	.002	3	.001	1	.005	1	.004	4	.001	930	.006	146	.002	0	.0	0	.0	0	.0	0	.0
368	61776	.010	525	.002	4	.001	0	.0	0	.0	5	.001	730	.004	161	.002	0	.0	0	.0	0	.0	0	.0
369	61776	.010	376	.001	2	.001	0	.0	0	.0	2	.000	564	.003	111	.001	0	.0	0	.0	0	.0	0	.0
535	15444	.003	2183	.007	59	.018	4	.019	4	.016	78	.018	664	.004	702	.008	0	.0	0	.0	0	.0	0	.0
552	15444	.003	4556	.015	30	.008	2	.009	2	.008	34	.008	913	.005	1407	.016	0	.0	0	.0	0	.0	0	.0
553	15444	.003	828	.003	5	.001	0	.0	0	.0	6	.001	166	.001	256	.003	0	.0	0	.0	0	.0	0	.0
569	15444	.003	459	.002	5	.001	0	.0	0	.0	6	.001	166	.001	118	.001	0	.0	0	.0	0	.0	0	.0
809	15444	.003	451	.001	21	.006	1	.005	1	.004	24	.006	166	.001	149	.002	0	.0	0	.0	0	.0	0	.0
810	15444	.003	3045	.010	122	.032	6	.028	8	.032	137	.032	1079	.006	985	.011	0	.0	0	.0	0	.0	0	.0
811	15444	.003	4280	.014	36	.010	2	.009	2	.008	48	.009	1278	.008	1274	.014	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
812	15444	.003	2499	.008	21	.006	1	.005	1	.004	24	.006	830	.005	688	.008	0	.0	0	.0	0	.0
813	15444	.003	918	.003	11	.003	1	.005	1	.004	12	.003	332	.002	236	.003	0	.0	0	.0	0	.0
814	15444	.003	80	.000	4	.001	0	.0	0	.0	5	.001	83	.000	24	.000	0	.0	0	.0	0	.0
TOTAL	5679608		301217		3787		212		249		4255		167575		90429		0		33		504		483	

***EXECUTION TERMINATING NORMALLY. 103 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
88	121 .001	51 .001	12 .000	0 .0	57 .008	0 .0	4 .037	2625 .100	0 .0	0 .0	0 .0	0 .0
89	904 .008	690 .011	90 .002	13 .005	110 .015	0 .0	4 .037	2625 .100	0 .0	0 .0	0 .0	0 .0
90	238 .002	145 .002	72 .002	4 .002	18 .002	0 .0	4 .037	2625 .100	0 .0	0 .0	0 .0	0 .0
91	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	2625 .100	0 .0	0 .0	0 .0	0 .0
109	911 .008	122 .002	732 .020	0 .0	56 .008	0 .0	0 .0	2625 .100	0 .0	0 .0	0 .0	0 .0
110	61 .001	31 .000	16 .000	0 .0	13 .002	0 .0	0 .0	2625 .100	0 .0	0 .0	0 .0	0 .0
111	140 .001	97 .002	15 .000	4 .002	25 .003	0 .0	0 .0	2625 .100	0 .0	0 .0	0 .0	0 .0
112	675 .006	557 .009	45 .001	27 .011	47 .006	0 .0	0 .0	2625 .100	0 .0	0 .0	0 .0	0 .0
113	1154 .010	986 .015	75 .002	49 .020	43 .006	0 .0	0 .0	2625 .100	0 .0	0 .0	0 .0	0 .0
114	4758 .043	2278 .035	2343 .064	54 .022	84 .012	0 .0	4 .037	2625 .100	0 .0	0 .0	0 .0	0 .0
115	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
131	92 .001	55 .001	14 .000	3 .001	20 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
132	429 .004	81 .001	319 .009	2 .001	27 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
133	29 .000	16 .000	3 .000	1 .000	9 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
134	39 .000	21 .000	7 .000	0 .0	12 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
135	140 .001	102 .002	16 .000	4 .002	18 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
136	564 .005	426 .007	49 .001	25 .010	64 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
137	9483 .086	4877 .076	4336 .118	26 .011	242 .033	0 .0	4 .037	0 .0	0 .0	0 .0	0 .0	0 .0
138	454 .014	170 .003	274 .007	1 .000	9 .001	0 .0	4 .037	0 .0	0 .0	0 .0	0 .0	0 .0
154	157 .001	117 .002	18 .000	2 .001	19 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
155	464 .004	372 .006	47 .001	4 .002	42 .006	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
156	178 .002	124 .002	10 .000	4 .002	40 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
157	109 .001	68 .001	3 .000	3 .001	35 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
158	166 .001	125 .002	31 .001	0 .0	11 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
159	274 .002	190 .003	47 .001	18 .007	20 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
160	373	.003	198	.003	82	.002	29	.012	63	.009	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
161	1441	.013	603	.009	750	.020	4	.002	83	.011	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
162	1480	.013	508	.008	941	.026	7	.003	24	.003	0	.0	4	.037	0	.0	0	.0	0	.0	0	.0
164	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
178	28	.000	19	.000	2	.000	0	.0	6	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
179	87	.001	62	.001	4	.000	0	.0	20	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
180	241	.002	177	.003	5	.000	3	.001	57	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
181	257	.002	191	.003	18	.000	5	.002	44	.006	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
182	740	.007	410	.006	268	.007	3	.001	59	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
183	1352	.012	763	.012	498	.014	2	.001	90	.012	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
184	3442	.031	1548	.024	1667	.045	8	.003	218	.030	90	.066	4	.037	0	.0	0	.0	0	.0	0	.0
185	4809	.043	2375	.037	2098	.057	23	.010	312	.043	90	.066	4	.037	0	.0	0	.0	0	.0	0	.0
186	8547	.077	6301	.098	1610	.044	70	.029	568	.078	60	.044	4	.037	0	.0	0	.0	0	.0	0	.0
203	301	.003	93	.001	184	.005	0	.0	20	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
204	845	.008	353	.005	297	.008	9	.004	180	.025	0	.0	4	.037	0	.0	0	.0	0	.0	0	.0
205	11565	.104	5667	.088	5377	.146	19	.008	494	.068	90	.066	4	.037	0	.0	0	.0	0	.0	0	.0
206	2112	.019	1800	.028	247	.007	2	.001	64	.009	90	.066	4	.037	0	.0	0	.0	0	.0	0	.0
207	7848	.071	2766	.043	4442	.121	7	.003	629	.086	90	.066	4	.037	0	.0	0	.0	0	.0	0	.0
208	1104	.010	610	.009	409	.011	8	.003	77	.011	90	.066	4	.037	0	.0	0	.0	0	.0	0	.0
209	1606	.014	947	.015	464	.013	51	.021	143	.020	0	.0	4	.037	0	.0	0	.0	0	.0	0	.0
210	521	.005	419	.007	30	.001	12	.005	60	.008	0	.0	4	.037	0	.0	0	.0	0	.0	0	.0
211	222	.002	150	.002	1	.000	6	.002	66	.009	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
228	951	.009	458	.007	386	.010	1	.000	103	.014	30	.022	4	.037	0	.0	0	.0	0	.0	0	.0
229	797	.007	365	.006	316	.009	6	.002	107	.015	80	.058	4	.037	0	.0	0	.0	0	.0	0	.0
230	689	.006	348	.005	270	.007	5	.002	65	.009	20	.015	4	.037	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNIPV RDS		UNIPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
231	160	.001	99	.002	13	.000	14	.006	34	.005	40	.029	4	.037	0	.0	0	.0	0	.0	0	.0
232	860	.008	798	.012	12	.000	10	.004	40	.005	20	.015	4	.037	0	.0	0	.0	0	.0	0	.0
233	298	.003	223	.003	38	.001	5	.002	31	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
234	15661	.141	10648	.165	4128	.112	35	.015	852	.117	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
235	1107	.010	617	.010	313	.009	11	.005	167	.023	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
236	41	.000	21	.000	0	.0	2	.001	18	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
254	239	.002	187	.003	13	.000	5	.002	34	.005	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
255	55	.000	34	.001	14	.000	6	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
256	32	.000	24	.000	2	.000	4	.002	2	.000	40	.029	0	.0	0	.0	0	.0	0	.0	0	.0
257	149	.001	91	.001	25	.001	25	.010	8	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
258	479	.004	382	.006	42	.001	39	.016	16	.002	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
259	1015	.009	981	.015	23	.001	1	.000	11	.002	40	.029	4	.037	0	.0	0	.0	0	.0	0	.0
260	570	.005	250	.004	207	.006	5	.002	108	.015	10	.007	4	.037	0	.0	0	.0	0	.0	0	.0
261	86	.001	69	.001	1	.000	0	.0	16	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
280	23	.000	19	.000	1	.000	1	.000	3	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
281	78	.001	61	.001	2	.000	4	.002	10	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
282	87	.001	20	.000	48	.001	19	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
283	501	.005	438	.007	21	.001	26	.011	16	.002	40	.029	0	.0	0	.0	0	.0	0	.0	0	.0
284	425	.004	245	.004	97	.003	52	.022	30	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
285	2774	.025	1694	.026	579	.016	214	.089	288	.040	20	.015	0	.0	0	.0	0	.0	0	.0	0	.0
286	289	.003	148	.002	48	.001	87	.036	6	.001	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
287	82	.001	49	.001	23	.001	0	.0	9	.001	30	.022	4	.037	0	.0	0	.0	0	.0	0	.0
307	586	.005	470	.007	92	.003	4	.002	20	.003	0	.0	4	.037	0	.0	0	.0	0	.0	0	.0
308	357	.003	289	.004	52	.001	3	.001	13	.002	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
309	152	.001	44	.001	97	.003	11	.005	0	.0	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
310	2104	.019	1014	.016	182	.005	665	.276	241	.033	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
311	1047	.009	593	.009	235	.006	149	.062	71	.010	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
312	942	.008	413	.006	296	.008	138	.057	95	.013	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
313	128	.001	49	.001	24	.001	54	.022	1	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
314	5	.000	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
335	140	.001	67	.001	65	.002	2	.001	6	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
336	1319	.012	1045	.016	225	.006	12	.005	37	.005	40	.029	0	.0	0	.0	0	.0	0	.0	0	.0
337	269	.002	221	.003	36	.001	5	.002	7	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
338	25	.000	24	.000	1	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
339	31	.000	29	.000	0	.0	0	.0	2	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
340	245	.002	74	.001	98	.003	47	.020	26	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
341	59	.001	16	.000	24	.001	12	.005	6	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
364	152	.001	42	.001	101	.003	2	.001	7	.001	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0
365	123	.001	59	.001	56	.002	3	.001	5	.001	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
366	19	.000	14	.000	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
367	14	.000	9	.000	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
368	17	.000	16	.000	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
369	5	.000	5	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
535	468	.054	316	.005	118	.003	14	.006	21	.003	15	.011	0	.0	0	.0	0	.0	0	.0	0	.0
552	609	.005	401	.006	23	.001	76	.032	109	.015	10	.007	0	.0	24	.001	0	.0	0	.0	0	.0
553	111	.001	73	.001	4	.000	14	.006	20	.003	0	.0	0	.0	15	.001	0	.0	0	.0	0	.0
569	35	.000	20	.000	0	.0	1	.000	15	.002	0	.0	0	.0	21	.001	0	.0	0	.0	0	.0
809	119	.001	81	.001	38	.001	0	.0	0	.0	0	.0	4	.037	0	.0	0	.0	0	.0	0	.0
810	799	.007	507	.006	271	.007	7	.003	13	.002	25	.018	0	.0	0	.0	0	.0	0	.0	0	.0
811	1770	.016	1442	.022	109	.003	63	.026	157	.022	30	.022	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		ALLOC #	PROP	COMM EMP ALLOC #	PROP	MFG EMP ALLOC #	PROP	AGRI EMP ALLOC #	PROP	CONS EMP ALLOC #	PROP	RAILROAD ALLOC #	PROP	REC VSLS ALLOC #	PROP	UNPV RDS ALLOC #	PROP	UNPV AIR ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
812	1209	.011	1038	.016	30	.001	38	.016	102	.014	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
813	71	.001	40	.001	0	.0	1	.000	30	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
814	6	.000	4	.000	0	.0	0	.0	4	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	110847		64350		36767		2410		7291		1370		108		26310		0		0		0		0	

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
88	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
89	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	25 .011	0 .0	0 .0	0 .0	0 .0
90	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	25 .011	0 .0	0 .0	0 .0	0 .0
91	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
109	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
110	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	0 .0
111	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	15 .006	0 .0	0 .0	0 .0	0 .0
112	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	45 .019	0 .0	0 .0	0 .0	0 .0
113	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	60 .025	0 .0	0 .0	0 .0	0 .0
114	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .002	0 .0	0 .0	0 .0	0 .0
115	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
131	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	15 .006	0 .0	0 .0	0 .0	5 .017
132	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	15 .006	0 .0	0 .0	0 .0	16 .053
133	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	0 .0
134	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	0 .0
135	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	40 .017	0 .0	0 .0	0 .0	0 .0
136	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	60 .025	0 .0	0 .0	0 .0	0 .0
137	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	35 .015	0 .0	0 .0	0 .0	0 .0
138	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	3 .001	0 .0	0 .0	0 .0	0 .0
154	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	40 .017	0 .0	0 .0	0 .0	0 .0
155	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	60 .025	0 .0	0 .0	0 .0	10 .033
156	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	5 .017
157	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	0 .0
158	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	50 .021	0 .0	0 .0	0 .0	0 .0
159	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	65 .027	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACPS
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
160	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	65 .027	0 .0	0 .0	0 .0	0 .0
161	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	50 .021	0 .0	0 .0	0 .0	0 .0
162	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	0 .0
164	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
178	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
179	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	0 .0
180	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	16 .053
181	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	50 .021	0 .0	0 .0	0 .0	0 .0
182	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	0 .0
183	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	0 .0
184	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .002	0 .0	0 .0	0 .0	10 .033
185	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	15 .006	0 .0	0 .0	0 .0	10 .033
186	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .002	0 .0	0 .0	0 .0	10 .033
203	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
204	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	0 .0
205	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	20 .008	0 .0	0 .0	0 .0	10 .033
206	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	20 .008	0 .0	0 .0	0 .0	10 .033
207	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	25 .011	0 .0	0 .0	0 .0	10 .033
208	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .004	0 .0	0 .0	0 .0	10 .033
209	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	20 .008	0 .0	0 .0	0 .0	0 .0
210	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	40 .017	0 .0	0 .0	0 .0	0 .0
211	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	35 .015	0 .0	0 .0	0 .0	0 .0
228	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	10 .033
229	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	10 .033
230	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	30 .013	0 .0	0 .0	0 .0	5 .017

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
231	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.008	0	.0	0	.0	0	.0	5	.017
232	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.011	0	.0	0	.0	0	.0	0	.0
233	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	45	.019	0	.0	0	.0	0	.0	0	.0
234	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.006	0	.0	0	.0	0	.0	0	.0
235	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.011	0	.0	0	.0	0	.0	0	.0
236	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.002	0	.0	0	.0	0	.0	0	.0
254	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	45	.019	0	.0	0	.0	0	.0	0	.0
255	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	45	.019	0	.0	0	.0	0	.0	0	.0
256	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.015	0	.0	0	.0	0	.0	10	.033
257	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.017	0	.0	0	.0	0	.0	0	.0
258	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0	0	.0
259	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.011	0	.0	0	.0	0	.0	5	.017
260	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.017	0	.0	0	.0	0	.0	10	.033
261	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.004	0	.0	0	.0	0	.0	5	.017
280	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.004	0	.0	0	.0	0	.0	0	.0
281	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0	0	.0
282	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0	0	.0
283	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.017	0	.0	0	.0	0	.0	10	.033
284	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.021	0	.0	0	.0	0	.0	0	.0
285	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.015	0	.0	0	.0	0	.0	10	.033
286	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0	10	.033
287	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	32	.013	0	.0	0	.0	0	.0	10	.033
307	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.004	0	.0	0	.0	0	.0	0	.0
308	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0	10	.033
309	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.015	0	.0	0	.0	0	.0	10	.033

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.									CRP ACRS				FOR ACRS
	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
310	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.015	0	.0	0	.0	10	.033
311	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	55	.023	0	.0	0	.0	10	.033
312	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.021	0	.0	0	.0	0	.0
313	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.006	0	.0	0	.0	0	.0
314	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
335	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.002	0	.0	0	.0	0	.0
336	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.017	0	.0	0	.0	10	.033
337	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.017	0	.0	0	.0	0	.0
338	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0
339	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.013	0	.0	0	.0	0	.0
340	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.008	0	.0	0	.0	0	.0
341	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.002	0	.0	0	.0	0	.0
364	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.017
365	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.006	0	.0	0	.0	10	.033
366	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.002	0	.0	0	.0	0	.0
367	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.004	0	.0	0	.0	0	.0
368	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.017	0	.0	0	.0	0	.0
369	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.006	0	.0	0	.0	0	.0
535	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.001	0	.0	0	.0	10	.033
552	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
553	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
569	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
809	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
810	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.001	0	.0	0	.0	0	.0
811	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.010

SUB-COUNTY NO.	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	CRP ACRS ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	FOP ACRS ALLOC #	PROP
812	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.007
813	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
814	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	0		0		0		0		0		0		2371		0		0		302	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
88	1660	437.0	4450.0
89	1660	442.0	4450.0
90	1660	447.0	4450.0
91	1660	452.0	4450.0
109	1660	427.0	4445.0
110	1660	432.0	4445.0
111	1660	437.0	4445.0
112	1660	442.0	4445.0
113	1660	447.0	4445.0
114	1660	452.0	4445.0
115	1660	457.0	4445.0
131	1660	422.0	4440.0
132	1660	427.0	4440.0
133	1660	432.0	4440.0
134	1660	437.0	4440.0
135	1660	442.0	4440.0
136	1660	447.0	4440.0
137	1660	452.0	4440.0
138	1660	457.0	4440.0
154	1660	417.0	4435.0
155	1660	422.0	4435.0
156	1660	427.0	4435.0
157	1660	432.0	4435.0
158	1660	437.0	4435.0
159	1660	442.0	4435.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM)		
			E	N
160		1660	447.0	4435.0
161		1660	452.0	4435.0
162		1660	457.0	4435.0
164		1660	467.0	4435.0
178		1660	417.0	4430.0
179		1660	422.0	4430.0
180		1660	427.0	4430.0
181		1660	432.0	4430.0
182		1660	437.0	4430.0
183		1660	442.0	4430.0
184		1660	447.0	4430.0
185		1660	452.0	4430.0
186		1660	457.0	4430.0
203		1660	417.0	4425.0
204		1660	422.0	4425.0
205		1660	427.0	4425.0
206		1660	432.0	4425.0
207		1660	437.0	4425.0
208		1660	442.0	4425.0
209		1660	447.0	4425.0
210		1660	452.0	4425.0
211		1660	457.0	4425.0
228		1660	417.0	4420.0
229		1660	422.0	4420.0
230		1660	427.0	4420.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM)	E	N
231		1660	432.0	4420.0
232		1660	437.0	4420.0
233		1660	442.0	4420.0
234		1660	447.0	4420.0
235		1660	452.0	4420.0
236		1660	457.0	4420.0
254		1660	417.0	4415.0
255		1660	422.0	4415.0
256		1660	427.0	4415.0
257		1660	432.0	4415.0
258		1660	437.0	4415.0
259		1660	442.0	4415.0
260		1660	447.0	4415.0
261		1660	452.0	4415.0
280		1660	412.0	4410.0
281		1660	417.0	4410.0
282		1660	422.0	4410.0
283		1660	427.0	4410.0
284		1660	432.0	4410.0
285		1660	437.0	4410.0
286		1660	442.0	4410.0
287		1660	447.0	4410.0
307		1660	412.0	4405.0
308		1660	417.0	4405.0
309		1660	422.0	4405.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
310		1660	427.0	4405.0
311		1660	432.0	4405.0
312		1660	437.0	4405.0
313		1660	442.0	4405.0
314		1660	447.0	4405.0
335		1660	407.0	4400.0
336		1660	412.0	4400.0
337		1660	417.0	4400.0
338		1660	422.0	4400.0
339		1660	427.0	4400.0
340		1660	432.0	4400.0
341		1660	437.0	4400.0
364		1660	407.0	4395.0
365		1660	412.0	4395.0
366		1660	417.0	4395.0
367		1660	422.0	4395.0
368		1660	427.0	4395.0
369		1660	432.0	4395.0
535	163	1660	464.5	4435.0
552	187	1660	464.5	4432.5
553	188	1660	467.0	4432.5
569	187	1660	464.5	4430.0
809	163	1660	462.0	4437.5
810	163	1660	462.0	4435.0
811	187	1660	462.0	4432.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO	NAME	UTM LOCATION (KM) E	N
812	187 1660	462.0	4430.0
813	212 1660	462.0	4427.5
814	212 1660	462.0	4425.0

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - DELAWARE COUNTY PA

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VMT	MISC	OTHER
	HHHHHH	NNNNNN	OOOOOO6Q				O R	JKL	IIIS	QP	O6QH	TU	06 HR

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA ALLOC #	AREA PROP	POPULATN ALLOC #	POPULATN PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	HOUSES ALLOC #	HOUSES PROP	COMM VSL ALLOC #	COMM VSL PROP	MIL AIR ALLOC #	MIL AIR PROP	CIVL AIR ALLOC #	CIVL AIR PROP	COMM AIR ALLOC #	COMM AIR PROP
211	61776	.035	116	.000	2	.000	0	.0	0	.0	3	.001	12	.000	3	.000	0	.0	0	.0	0	.0
235	61776	.035	392	.001	2	.000	0	.0	0	.0	2	.000	24	.001	11	.001	0	.0	0	.0	0	.0
236	61776	.035	1545	.003	28	.006	1	.004	2	.007	32	.006	172	.005	47	.003	0	.0	0	.0	0	.0
260	61776	.035	167	.000	6	.001	0	.0	0	.0	7	.001	17	.000	5	.000	0	.0	0	.0	0	.0
261	61776	.035	3846	.007	36	.008	2	.008	2	.007	39	.008	236	.006	107	.006	0	.0	0	.0	0	.0
262	61776	.035	5558	.009	98	.021	5	.019	6	.020	109	.021	479	.013	140	.007	0	.0	0	.0	0	.0
287	61776	.035	1194	.002	46	.010	3	.012	3	.010	52	.010	118	.003	38	.002	0	.0	0	.0	0	.0
288	61776	.035	3795	.006	135	.029	7	.027	9	.030	152	.030	342	.009	111	.006	0	.0	0	.0	0	.0
289	61776	.035	7772	.013	112	.024	6	.023	7	.024	126	.025	543	.015	227	.012	0	.0	0	.0	0	.0
315	61776	.035	230	.000	7	.002	0	.0	0	.0	8	.002	24	.001	7	.000	0	.0	0	.0	0	.0
316	61776	.035	3821	.006	49	.011	3	.012	3	.010	55	.011	189	.005	114	.006	0	.0	0	.0	0	.0
552	15444	.009	1102	.002	12	.003	1	.004	1	.003	13	.003	35	.001	37	.002	0	.0	0	.0	0	.0
553	15444	.009	4591	.008	51	.011	2	.008	3	.010	56	.011	189	.005	143	.008	0	.0	0	.0	0	.0
554	15444	.009	1240	.002	12	.003	1	.004	1	.003	14	.003	47	.001	34	.002	0	.0	0	.0	0	.0
569	15444	.009	4950	.008	53	.011	3	.012	3	.010	59	.012	165	.004	162	.009	0	.0	0	.0	0	.0
570	15444	.009	4195	.007	38	.008	2	.008	2	.007	42	.008	142	.004	111	.006	0	.0	0	.0	0	.0
571	15444	.009	5425	.009	47	.010	2	.008	2	.007	51	.010	271	.007	177	.009	0	.0	0	.0	0	.0
572	15444	.009	423	.001	4	.001	0	.0	0	.0	5	.001	24	.001	16	.001	0	.0	0	.0	0	.0
586	15444	.009	1363	.002	22	.005	1	.004	1	.003	24	.005	99	.003	36	.002	0	.0	0	.0	0	.0
587	15444	.009	3307	.006	29	.006	1	.004	2	.007	32	.006	106	.003	72	.004	0	.0	0	.0	0	.0
588	15444	.009	3723	.006	20	.004	1	.004	1	.003	22	.004	248	.007	101	.005	0	.0	0	.0	0	.0
589	15444	.009	5401	.009	63	.014	3	.012	4	.014	70	.014	507	.014	160	.009	0	.0	0	.0	0	.0
590	15444	.009	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
603	15444	.009	4523	.008	42	.013	3	.012	4	.014	69	.014	212	.006	138	.007	0	.0	0	.0	0	.0
604	15444	.009	7365	.012	60	.017	4	.015	5	.017	88	.017	319	.009	218	.012	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
605	15444	.009	5685	.010	55	.012	3	.012	3	.010	60	.012	366	.010	165	.009	0	.0	0	.0	0	.0
606	15444	.009	15782	.027	70	.015	3	.012	4	.014	76	.015	755	.020	478	.026	0	.0	0	.0	0	.0
607	15444	.009	8252	.014	33	.007	2	.008	3	.010	37	.007	425	.011	255	.014	0	.0	0	.0	0	.0
620	15444	.009	4835	.008	33	.007	2	.008	2	.007	37	.007	201	.005	143	.008	0	.0	0	.0	0	.0
621	15444	.009	4583	.008	28	.006	1	.004	2	.007	31	.006	212	.006	137	.007	0	.0	0	.0	0	.0
622	15444	.009	9930	.017	96	.021	5	.019	5	.017	107	.021	566	.015	305	.016	0	.0	0	.0	0	.0
623	15444	.009	16897	.029	110	.024	6	.023	6	.020	123	.024	885	.024	515	.028	0	.0	0	.0	0	.0
624	15444	.009	22202	.038	135	.029	6	.023	8	.027	147	.029	1133	.030	733	.039	0	.0	0	.0	0	.0
625	15444	.009	10587	.018	90	.020	5	.019	5	.017	97	.019	838	.022	419	.022	0	.0	0	.0	0	.0
637	15444	.009	2615	.004	38	.008	2	.008	3	.010	43	.008	160	.004	74	.004	0	.0	0	.0	0	.0
638	15444	.009	2439	.004	25	.005	1	.004	2	.007	28	.005	165	.004	75	.004	0	.0	0	.0	0	.0
639	15444	.009	7637	.013	104	.023	5	.019	6	.020	115	.023	307	.008	231	.012	0	.0	0	.0	0	.0
640	15444	.009	22354	.038	123	.027	7	.027	8	.027	136	.027	1310	.035	747	.040	0	.0	0	.0	0	.0
641	15444	.009	28099	.048	115	.025	7	.027	8	.027	126	.025	1758	.047	1016	.054	0	.0	0	.0	0	.0
642	15444	.009	24289	.041	91	.020	4	.015	5	.017	99	.019	1027	.028	892	.048	0	.0	0	.0	0	.0
654	15444	.009	8572	.015	103	.022	6	.023	7	.024	115	.023	595	.016	310	.017	0	.0	0	.0	0	.0
655	15444	.009	9026	.015	107	.023	5	.019	7	.024	119	.023	661	.018	304	.016	0	.0	0	.0	0	.0
656	15444	.009	10009	.017	87	.019	4	.015	5	.017	97	.019	437	.012	297	.016	0	.0	0	.0	0	.0
657	15444	.009	19701	.033	112	.024	6	.023	7	.024	122	.024	1251	.034	626	.033	0	.0	0	.0	7	.070
658	15444	.009	21369	.036	88	.019	6	.023	6	.020	97	.019	1322	.035	689	.037	0	.0	0	.0	7	.070
659	15444	.009	22889	.039	93	.020	6	.023	6	.020	105	.021	1404	.038	750	.040	0	.0	0	.0	7	.070
671	15444	.009	4577	.008	40	.009	2	.008	2	.007	44	.009	330	.009	136	.007	0	.0	0	.0	0	.0
672	15444	.009	8654	.015	62	.013	3	.012	4	.014	68	.013	673	.018	265	.014	0	.0	0	.0	0	.0
673	15444	.009	14386	.024	96	.021	5	.019	5	.017	106	.021	661	.018	444	.024	0	.0	0	.0	0	.0
674	15444	.009	23502	.040	94	.020	5	.019	5	.017	105	.021	991	.027	707	.038	0	.0	0	.0	7	.070

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
675	15444	.009	22300	.038	93	.020	5	.019	5	.017	101	.020	1156	.031	690	.037	0	.0	1	.250	1	.250	8	.080
676	15444	.009	8020	.014	25	.005	2	.008	2	.007	27	.005	401	.011	240	.013	0	.0	1	.250	1	.250	7	.070
688	15444	.009	8490	.014	47	.010	2	.008	3	.010	53	.010	453	.012	240	.013	0	.0	0	.0	0	.0	0	.0
689	15444	.009	11738	.020	57	.012	4	.015	4	.014	64	.013	802	.022	384	.021	0	.0	0	.0	0	.0	0	.0
690	15444	.009	15273	.026	61	.013	3	.012	3	.010	67	.013	673	.018	486	.026	0	.0	0	.0	0	.0	0	.0
691	15444	.009	13531	.023	150	.033	8	.031	9	.030	167	.033	732	.020	449	.024	0	.0	0	.0	0	.0	5	.050
692	15444	.009	7076	.012	27	.006	3	.012	3	.010	30	.006	425	.011	188	.010	0	.0	1	.250	1	.250	6	.060
693	15444	.009	936	.002	12	.003	1	.004	1	.003	13	.003	59	.002	26	.001	0	.0	1	.250	1	.250	12	.120
694	15444	.009	242	.000	7	.002	0	.0	0	.0	8	.002	24	.001	8	.000	0	.0	0	.0	0	.0	12	.120
705	15444	.009	11619	.020	52	.011	4	.015	4	.014	58	.011	720	.019	341	.018	0	.0	0	.0	0	.0	0	.0
706	15444	.009	25008	.042	226	.049	14	.054	16	.054	252	.049	2065	.055	821	.044	0	.0	0	.0	0	.0	0	.0
707	15444	.009	7262	.012	86	.019	6	.023	7	.024	95	.019	909	.024	243	.013	9	.105	0	.0	0	.0	0	.0
708	15444	.009	3113	.005	114	.025	7	.027	8	.027	127	.025	566	.015	97	.005	9	.105	0	.0	0	.0	5	.050
709	15444	.009	836	.001	34	.007	2	.008	2	.007	38	.007	142	.004	28	.001	9	.105	0	.0	0	.0	5	.050
710	15444	.009	484	.001	15	.003	1	.004	1	.003	17	.003	118	.003	16	.001	9	.105	0	.0	0	.0	6	.060
711	15444	.009	242	.000	8	.002	1	.004	1	.003	8	.002	94	.003	8	.000	9	.105	0	.0	0	.0	6	.060
722	15444	.009	11726	.020	165	.036	10	.039	12	.041	184	.036	1050	.028	389	.021	3	.035	0	.0	0	.0	0	.0
723	15444	.009	7153	.012	54	.012	7	.027	7	.024	61	.012	1357	.036	232	.012	12	.140	0	.0	0	.0	0	.0
724	15444	.009	53	.000	1	.000	1	.004	1	.003	1	.000	260	.007	2	.000	14	.163	0	.0	0	.0	0	.0
739	15444	.009	1989	.003	7	.002	3	.012	3	.010	8	.002	684	.018	68	.004	12	.140	0	.0	0	.0	0	.0
813	15444	.009	513	.001	10	.002	1	.004	1	.003	11	.002	47	.001	15	.001	0	.0	0	.0	0	.0	0	.0
814	15444	.009	806	.001	14	.003	1	.004	1	.003	16	.003	66	.002	24	.001			0	.0	0	.0	0	.0
815	15444	.009	1895	.003	27	.006	1	.004	2	.007	31	.006	118	.003	57	.003	0	.	0	.0	0	.0	0	.0
816	15444	.009	973	.002	14	.003	1	.004	1	.003	15	.003	76	.002	25	.001	0	.0	0	.0	0	.0	0	.0
817	15444	.009	1725	.003	24	.005	1	.004	1	.003	26	.005	118	.003	37	.002	0	.0	0	.0	0	.0	0	:0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM V** #	COMM V** ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
818	15444	.009	2826	.005	43	.009	2	.008	2	.007	48	.009	189	.005	72	.004	0	.0	0	.0	0	.0	0	.0
819	15444	.009	5745	.010	32	.007	1	.004	1	.003	35	.007	271	.007	167	.009	0	.0	0	.0	0	.0	0	.0
820	15444	.009	5906	.010	38	.008	2	.008	2	.007	42	.008	236	.006	165	.009	0	.0	0	.0	0	.0	0	.0
821	15444	.009	6002	.010	95	.021	5	.019	6	.020	105	.021	330	.009	184	.010	0	.0	0	.0	0	.0	0	.0
822	15444	.009	2382	.004	29	.006	2	.008	2	.007	33	.006	165	.004	78	.004	0	.0	0	.0	0	.0	0	.0
TOTAL	1745172		590779		4609		259		296		5111		37259		18708		86		4		4		100	

***EXECUTION TERMINATING NORMALLY. 80 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRT EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP
211	30 .000	23 .000	3 .000	0 .0	4 .000	0 .0	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
235	63 .000	53 .000	0 .0	5 .007	2 .000	0 .0	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
236	529 .003	400 .003	49 .001	3 .004	75 .006	0 .0	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
260	44 .000	24 .000	12 .000	1 .001	7 .001	0 .0	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
261	645 .003	515 .004	30 .001	36 .052	42 .003	5 .007	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
262	3728 .020	2743 .023	819 .015	16 .023	141 .010	70 .098	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
287	316 .002	173 .001	88 .002	7 .010	48 .004	15 .021	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
288	952 .005	638 .005	222 .004	22 .032	69 .005	30 .042	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
289	1226 .007	628 .005	515 .010	14 .020	67 .005	0 .0	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
315	46 .000	32 .000	9 .000	1 .001	3 .000	0 .0	0 .0	6 .004	0 .0	0 .0	0 .0	0 .0
316	470 .003	356 .003	78 .001	4 .006	31 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
552	770 .004	655 .006	39 .001	1 .001	75 .006	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
553	2071 .011	1242 .011	670 .013	39 .056	114 .008	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
554	623 .003	409 .003	187 .003	9 .013	18 .001	2 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
569	3400 .018	2881 .024	207 .004	6 .009	307 .023	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
570	2566 .014	2025 .017	419 .008	12 .017	110 .008	16 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
571	1602 .009	1346 .011	147 .003	4 .006	105 .008	37 .052	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
572	83 .000	72 .001	0 .0	0 .0	11 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
586	513 .003	415 .004	65 .001	2 .003	31 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
587	2119 .011	1723 .015	340 .006	5 .007	50 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
588	794 .004	705 .006	50 .001	1 .001	38 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
589	1292 .007	1141 .010	8 .000	35 .050	108 .008	16 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
590	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
603	1097 .006	745 .006	36 .001	16 .023	300 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
604	1674 .010	1207 .010	308 .006	10 .014	349 .026	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
605	1479 .008	987 .008	306 .006	1 .001	184 .014	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
606	2451 .013	1878 .016	104 .002	19 .027	450 .033	16 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
607	1461 .008	1011 .009	27 .001	36 .052	381 .028	8 .011	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
620	862 .005	611 .005	21 .000	16 .023	214 .016	0 .0	2 .083	0 .0	0 .0	0 .0	0 .0	0 .0
621	704 .004	523 .004	14 .000	6 .009	161 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
622	2640 .014	1727 .015	511 .010	8 .011	395 .029	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
623	4456 .024	3794 .032	249 .005	9 .013	392 .029	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
624	6064 .033	5116 .043	121 .002	18 .026	734 .054	0 .0	0 .0	1 .001	0 .0	0 .0	0 .0	0 .0
625	5968 .032	5346 .045	155 .003	1 .001	465 .034	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
637	240 .001	159 .001	6 .000	1 .001	74 .005	0 .0	2 .083	0 .0	0 .0	0 .0	0 .0	0 .0
638	344 .002	258 .002	2 .000	0 .0	82 .006	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
639	2025 .011	1636 .014	202 .004	7 .010	182 .013	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
640	3086 .017	2682 .023	103 .002	6 .009	294 .022	0 .0	0 .0	2 .001	0 .0	0 .0	0 .0	0 .0
641	6142 .033	4585 .039	799 .015	18 .026	741 .055	0 .0	0 .0	3 .002	0 .0	0 .0	0 .0	0 .0
642	6326 .034	4632 .039	947 .018	4 .006	742 .055	20 .028	0 .0	1 .001	0 .0	0 .0	0 .0	0 .0
654	4610 .025	3913 .033	266 .005	54 .078	369 .027	26 .036	0 .0	1 .001	0 .0	0 .0	0 .0	0 .0
655	3452 .019	2933 .025	83 .002	32 .046	402 .030	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
656	4168 .022	3173 .027	628 .012	13 .019	353 .026	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
657	6352 .034	3209 .027	2498 .047	25 .036	600 .044	22 .031	0 .0	1 .001	0 .0	0 .0	0 .0	0 .0
658	5022 .027	2773 .024	1747 .033	6 .009	495 .037	23 .032	0 .0	9 .006	0 .0	0 .0	0 .0	0 .0
659	5732 .031	3586 .030	1840 .034	2 .003	304 .022	22 .031	0 .0	41 .025	0 .0	0 .0	0 .0	0 .0
671	609 .003	379 .003	153 .003	7 .010	70 .005	4 .006	0 .0	2 .001	0 .0	0 .0	0 .0	0 .0
672	802 .004	684 .006	69 .001	3 .004	46 .003	20 .028	0 .0	3 .002	0 .0	0 .0	0 .0	0 .0
673	4201 .023	2708 .023	1244 .023	3 .004	243 .018	20 .028	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
674	3729 .020	2184 .019	1135 .021	22 .032	377 .028	16 .022	0 .0	15 .009	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR				
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
675	4027 .022	2662 .023	990 .018	4 .006	370 .027	29 .041	0 .0	14 .009	0 .0	0 .0	0 .0	0 .0	
676	912 .005	655 .006	217 .004	0 .0	41 .003	8 .011	0 .0	4 .002	0 .0	0 .0	0 .0	0 .0	
688	848 .005	569 .005	146 .003	14 .020	118 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	
689	1138 .006	905 .008	106 .002	12 .017	114 .008	0 .0	0 .0	3 .002	0 .0	0 .0	0 .0	0 .0	
690	3602 .019	2350 .020	1120 .021	6 .009	127 .009	25 .035	0 .0	9 .006	0 .0	0 .0	0 .0	0 .0	
691	7278 .039	2742 .023	4342 .081	3 .004	191 .014	14 .020	0 .0	8 .005	0 .0	0 .0	0 .0	0 .0	
692	2226 .012	812 .007	1365 .026	2 .003	46 .003	10 .014	0 .0	3 .002	0 .0	0 .0	0 .0	0 .0	
693	1389 .007	283 .002	1179 .022	0 .0	7 .001	15 .021	0 .0	2 .001	0 .0	0 .0	0 .0	0 .0	
694	871 .005	105 .001	763 .014	0 .0	2 .000	15 .021	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	
705	1560 .008	1300 .011	133 .002	35 .050	91 .007	0 .0	0 .0	1 .001	0 .0	0 .0	0 .0	0 .0	
706	15130 .081	11285 .096	3455 .065	17 .024	368 .027	30 .042	0 .0	77 .048	0 .0	0 .0	0 .0	0 .0	
707	7593 .041	1937 .016	5437 .102	0 .0	218 .016	25 .035	4 .167	110 .068	0 .0	0 .0	0 .0	0 .0	
708	5098 .027	505 .004	4540 .085	2 .003	51 .004	18 .025	2 .083	80 .050	0 .0	0 .0	0 .0	0 .0	
709	2281 .012	329 .003	1937 .036	0 .0	16 .001	18 .025	2 .083	287 .178	0 .0	0 .0	0 .0	0 .0	
710	1741 .009	211 .002	1526 .029	0 .0	5 .000	10 .014	2 .083	251 .156	0 .0	0 .0	0 .0	0 .0	
711	871 .005	105 .001	763 .014	0 .0	2 .000	0 .0	2 .083	108 .067	0 .0	0 .0	0 .0	0 .0	
722	4348 .023	2764 .023	1304 .024	0 .0	278 .021	18 .025	0 .0	38 .024	0 .0	0 .0	0 .0	0 .0	
723	3035 .016	1268 .011	1635 .031	0 .0	131 .010	10 .014	4 .167	191 .118	0 .0	0 .0	0 .0	0 .0	
724	609 .003	42 .000	565 .011	0 .0	2 .000	0 .0	0 .0	102 .063	0 .0	0 .0	0 .0	0 .0	
739	2183 .012	641 .005	1523 .028	0 .0	18 .001	0 .0	4 .167	185 .115	0 .0	0 .0	0 .0	0 .0	
813	121 .001	97 .001	9 .000	1 .001	15 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	
814	201 .001	150 .001	15 .000	3 .004	34 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	
815	476 .003	319 .003	29 .001	12 .017	117 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	
816	590 .003	515 .004	40 .001	0 .0	35 .003	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	
817	1963 .011	1656 .014	238 .004	1 .001	67 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV PDS	UNPV AIR			
818	# 1606	# 942	# 571	# 8	# 83	# 50	# 0	# 0	# 0	# 0	# 0	# 0
	ALLOC PROP .009	ALLOC PROP .008	ALLOC PROP .011	ALLOC PROP .011	ALLOC PROP .006	ALLOC PROP .070	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0
819	# 770	# 333	# 388	# 6	# 42	# 0	# 0	# 0	# 0	# 0	# 0	# 0
	ALLOC PROP .004	ALLOC PROP .003	ALLOC PROP .007	ALLOC PROP .009	ALLOC PROP .003	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0
820	# 355	# 255	# 62	# 1	# 36	# 0	# 0	# 0	# 0	# 0	# 0	# 0
	ALLOC PROP .002	ALLOC PROP .002	ALLOC PROP .001	ALLOC PROP .001	ALLOC PROP .003	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0
821	# 1247	# 923	# 272	# 3	# 48	# 20	# 0	# 0	# 0	# 0	# 0	# 0
	ALLOC PROP .007	ALLOC PROP .008	ALLOC PROP .005	ALLOC PROP .004	ALLOC PROP .004	ALLOC PROP .028	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0
822	# 1953	# 628	# 1312	# 0	# 12	# 12	# 0	# 0	# 0	# 0	# 0	# 0
	ALLOC PROP .011	ALLOC PROP .005	ALLOC PROP .025	ALLOC PROP .0	ALLOC PROP .001	ALLOC PROP .017	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0	ALLOC PROP .0
TOTAL	185800	117846	53519	696	13540	715	24	1612	0	0	0	0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
211	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
235	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
236	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.172	0	.0	0	.0
260	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
261	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.276	0	.0	0	.0
262	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.069	0	.0	10	.143
287	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.071
288	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.207	0	.0	10	.143
289	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.207	0	.0	0	.0
315	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
316	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
552	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
553	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.071
554	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.071
569	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
570	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
571	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
572	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
586	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007	0	.0	2	.029
587	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
588	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
589	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
590	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
603	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007	0	.0	0	.0
604	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
605	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
606	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
607	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
620	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	1 .007	0 .0	0 .0	0 .0	2 .029
621	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
622	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
623	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
624	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
625	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
637	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	2 .014	0 .0	0 .0	0 .0	3 .043
638	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
639	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
640	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
641	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
642	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
654	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	3 .043
655	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	4 .057
656	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
657	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
658	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
659	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
671	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
672	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	1 .014
673	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
674	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
675	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
676	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
688	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
689	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
690	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
691	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
692	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
693	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
694	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
705	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
706	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
707	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
708	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
709	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
710	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
711	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
722	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
723	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
724	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
739	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
813	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007	0	.0	0	.0	0	.0
814	0	.0	0	.0	0	.0	0	.0	0	.0	2	.014	0	.0	0	.0	3	.043
815	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007	0	.0	0	.0	2	.029
816	0	.0	0	.0	0	.0	0	.0	0	.0	1	.007	0	.0	0	.0	3	.043
817	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	4	.057

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP	ALLOC #	ALLOC PROP
818	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.043
819	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
820	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
821	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
822	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	0		0		0		0		145		0		79	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME		UTM LOCATION (KM) E	N
211		2360	457.0	4425.0
235		2360	452.0	4420.0
236		2360	457.0	4420.0
260		2360	447.0	4415.0
261		2360	452.0	4415.0
262		2360	457.0	4415.0
287		2360	447.0	4410.0
288		2360	452.0	4410.0
289		2360	457.0	4410.0
315		2360	452.0	4405.0
316		2360	457.0	4405.0
552	187	2360	464.5	4432.5
553	188	2360	467.0	4432.5
554	188	2360	469.5	4432.5
569	187	2360	464.5	4430.0
570	188	2360	467.0	4430.0
571	188	2360	469.5	4430.0
572	189	2360	472.0	4430.0
586	212	2360	464.5	4427.5
587	213	2360	467.0	4427.5
588	213	2360	469.5	4427.5
589	214	2360	472.0	4427.5
590	214	2360	474.5	4427.5
603	212	2360	464.5	4425.0
604	213	2360	467.0	4425.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
605	213 2360	469.5	4425.0
606	214 2360	472.0	4425.0
607	214 2360	474.5	4425.0
620	237 2360	464.5	4422.5
621	238 2360	467.0	4422.5
622	238 2360	469.5	4422.5
623	239 2360	472.0	4422.5
624	239 2360	474.5	4422.5
625	240 2360	477.0	4422.5
637	237 2360	464.5	4420.0
638	238 2360	467.0	4420.0
639	238 2360	469.5	4420.0
640	239 2360	472.0	4420.0
641	239 2360	474.5	4420.0
642	240 2360	477.0	4420.0
654	263 2360	464.5	4417.5
655	264 2360	467.0	4417.5
656	264 2360	469.5	4417.5
657	265 2360	472.0	4417.5
658	265 2360	474.5	4417.5
659	266 2360	477.0	4417.5
671	263 2360	464.5	4415.0
672	264 2360	467.0	4415.0
673	264 2360	469.5	4415.0
674	265 2360	472.0	4415.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
675	265 2360	474.5	4415.0
676	266 2360	477.0	4415.0
688	290 2360	464.5	4412.5
689	291 2360	467.0	4412.5
690	291 2360	469.5	4412.5
691	292 2360	472.0	4412.5
692	292 2360	474.5	4412.5
693	293 2360	477.0	4412.5
694	293 2360	479.5	4412.5
705	290 2360	464.5	4410.0
706	291 2360	467.0	4410.0
707	291 2360	469.5	4410.0
708	292 2360	472.0	4410.0
709	292 2360	474.5	4410.0
710	293 2360	477.0	4410.0
711	293 2360	479.5	4410.0
722	317 2360	464.5	4407.5
723	318 2360	467.0	4407.5
724	318 2360	469.5	4407.5
739	317 2360	464.5	4405.0
813	212 2360	462.0	4427.5
814	212 2360	462.0	4425.0
815	237 2360	462.0	4422.5
816	237 2360	462.0	4420.0
817	263 2360	462.0	4417.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
818	263 2360	462.0	4415.0
819	290 2360	462.0	4412.5
820	290 2360	462.0	4410.0
821	317 2360	462.0	4407.5
822	317 2360	462.0	4405.0

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - GLOUCESTER COUNTY NJ

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VMT	MISC	OTHER
	HHHHHH	NNNNNN	OOOOOO6Q	NNN			O R	JKL	IIIS	QP	O6QH	TU	06 H0

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
376	61776	.022	773	.004	44	.018	3	.022	3	.018	50	.018	528	.011	252	.004	0	.0	0	.0	0	.0	0	.0
377	61776	.022	3051	.015	68	.027	4	.030	4	.024	77	.028	2358	.050	1037	.017	0	.0	0	.0	0	.0	0	.0
378	61776	.022	1285	.006	22	.009	1	.007	1	.006	25	.009	845	.018	385	.006	0	.0	0	.0	0	.0	0	.0
379	61776	.022	2638	.013	22	.009	1	.007	1	.006	25	.009	792	.017	757	.013	0	.0	0	.0	0	.0	0	.0
380	61776	.022	18319	.090	132	.053	7	.052	8	.048	145	.052	2693	.057	5636	.094	0	.0	0	.0	0	.0	0	.0
381	61776	.022	11525	.057	88	.035	4	.030	6	.036	99	.036	792	.017	3190	.053	0	.0	0	.0	66	.041	2	.001
382	61776	.022	3169	.016	24	.010	1	.007	2	.012	27	.010	264	.006	893	.015	0	.0	0	.0	66	.041	2	.001
400	61776	.022	264	.001	13	.005	1	.007	1	.006	15	.005	176	.004	85	.001	0	.0	0	.0	0	.0	0	.0
401	61776	.022	646	.003	20	.008	1	.007	2	.012	23	.008	704	.015	191	.003	0	.0	0	.0	0	.0	0	.0
402	61776	.022	1035	.005	16	.006	1	.007	1	.006	18	.006	1109	.024	298	.005	0	.0	0	.0	0	.0	0	.0
403	61776	.022	2217	.011	20	.008	1	.007	1	.006	22	.008	880	.019	659	.011	0	.0	0	.0	0	.0	0	.0
404	61776	.022	8256	.041	47	.019	2	.015	3	.018	51	.018	1390	.030	2361	.039	0	.0	0	.0	0	.0	0	.0
405	61776	.022	9990	.049	60	.024	3	.022	4	.024	66	.024	1496	.032	2876	.048	0	.0	0	.0	66	.041	2	.001
406	61776	.022	6681	.033	72	.029	4	.030	5	.030	81	.029	1267	.027	2119	.035	0	.0	0	.0	66	.041	2	.001
407	61776	.022	4697	.023	50	.020	2	.015	3	.018	56	.020	880	.019	1486	.025	0	.0	0	.0	0	.0	0	.0
408	61776	.022	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
425	61776	.022	310	.002	3	.001	0	.0	0	.0	3	.001	176	.004	96	.002	0	.0	0	.0	0	.0	0	.0
426	61776	.022	2529	.012	14	.006	1	.007	1	.006	15	.005	845	.018	761	.013	0	.0	0	.0	0	.0	0	.0
427	61776	.022	3497	.017	16	.006	1	.007	1	.006	18	.006	845	.018	1040	.017	0	.0	0	.0	0	.0	0	.0
428	61776	.022	2166	.011	10	.004	1	.007	1	.006	11	.004	334	.007	650	.011	0	.0	0	.0	0	.0	0	.0
429	61776	.022	3037	.015	22	.009	1	.007	2	.012	24	.009	440	.009	922	.015	0	.0	0	.0	0	.0	0	.0
430	61776	.022	972	.005	7	.003	0	.0	0	.0	8	.003	141	.003	295	.005	0	.0	0	.0	0	.0	0	.0
448	61776	.022	528	.003	1	.000	0	.0	0	.0	1	.000	88	.002	156	.003	0	.0	0	.0	0	.0	0	.0
449	61776	.022	1373	.007	2	.001	0	.0	0	.0	2	.001	229	.005	406	.007	0	.0	0	.0	0	.0	0	.0
450	61776	.022	1902	.009	3	.001	0	.0	0	.0	3	.001	317	.007	563	.009	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP																	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
451	61776	.022	2271	.011	10	.004	1	.007	1	.006	11	.004	352	.007	681	.011	0	.0	0	.0	0	.0	0	.0
452	61776	.022	1215	.006	9	.004	0	.0	1	.006	10	.004	176	.004	369	.006	0	.0	0	.0	0	.0	0	.0
468	61776	.022	528	.003	1	.000	0	.0	0	.0	1	.000	88	.002	156	.003	0	.0	0	.0	0	.0	0	.0
469	61776	.022	2724	.013	2	.001	1	.007	1	.006	3	.001	1936	.041	840	.014	0	.0	0	.0	0	.0	0	.0
470	61776	.022	951	.005	1	.000	0	.0	0	.0	2	.001	158	.003	281	.005	0	.0	0	.0	8	.005	0	.0
695	15444	.005	1866	.009	31	.012	2	.015	2	.012	34	.012	1197	.025	531	.009	8	.094	1	.167	35	.022	6	.004
696	15444	.005	1771	.009	17	.007	1	.007	1	.006	20	.007	299	.006	503	.008	7	.082	0	.0	35	.022	6	.004
697	15444	.005	1491	.007	57	.023	3	.022	4	.024	63	.023	528	.011	525	.009	5	.059	0	.0	0	.0	0	.0
707	15444	.005	175	.001	3	.001	0	.0	0	.0	4	.001	317	.007	50	.001	4	.047	0	.0	0	.0	0	.0
708	15444	.005	408	.002	8	.003	1	.007	1	.006	9	.003	739	.016	117	.002	9	.106	0	.0	69	.043	16	.010
709	15444	.005	292	.001	6	.002	1	.007	1	.006	6	.002	704	.015	84	.001	8	.094	1	.167	70	.044	17	.010
710	15444	.005	1750	.009	25	.010	1	.007	2	.012	28	.010	704	.015	540	.009	9	.106	0	.0	69	.043	325	.198
711	15444	.005	2870	.014	30	.012	2	.015	3	.018	34	.012	1707	.036	857	.014	8	.094	1	.167	70	.044	325	.198
712	15444	.005	3119	.015	34	.014	2	.015	2	.012	39	.014	634	.013	886	.015	0	.0	0	.0	35	.022	6	.004
713	15444	.005	3258	.016	39	.016	2	.015	3	.018	44	.016	757	.016	956	.016	0	.0	0	.0	34	.021	6	.004
714	15444	.005	6960	.034	124	.050	7	.052	8	.048	138	.049	1267	.027	2211	.037	0	.0	0	.0	0	.0	0	.0
715	15444	.005	3251	.016	66	.027	4	.030	4	.024	74	.027	510	.011	956	.016	0	.0	0	.0	0	.0	0	.0
716	15444	.005	501	.002	6	.002	0	.0	0	.0	7	.003	35	.001	135	.002	0	.0	0	.0	0	.0	0	.0
723	15444	.005	114	.001	11	.004	1	.007	1	.006	13	.005	88	.002	38	.001	9	.106	0	.0	0	.0	0	.0
724	15444	.005	522	.003	19	.008	1	.007	1	.006	21	.008	211	.004	156	.003	3	.035	0	.0	0	.0	0	.0
725	15444	.005	1190	.006	23	.009	1	.007	2	.012	27	.010	370	.008	343	.006	0	.0	0	.0	35	.022	70	.043
726	15444	.005	1167	.006	21	.008	1	.007	2	.012	24	.009	352	.007	335	.006	0	.0	1	.167	35	.022	70	.043
727	15444	.005	3501	.017	50	.020	3	.022	3	.018	56	.020	880	.019	1080	.018	0	.0	0	.0	35	.022	70	.043
728	15444	.005	3749	.018	38	.015	2	.015	3	.018	43	.015	581	.012	1108	.018	0	.0	1	.167	35	.022	70	.043
729	15444	.005	2620	.013	19	.008	1	.007	1	.006	21	.008	229	.005	744	.012	0	.0	1	.167	35	.022	70	.043

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
730	15444	.005	5365	.026	59	.024	3	.022	4	.024	66	.024	845	.018	1706	.028	0	.0	0	.0	35	.022	70	.043
731	15444	.005	7200	.035	84	.034	4	.030	5	.030	94	.034	1091	.023	2292	.038	0	.0	0	.0	0	.0	0	.0
732	15444	.005	3761	.018	46	.019	3	.022	3	.018	52	.019	264	.006	1011	.017	0	.0	0	.0	0	.0	0	.0
733	15444	.005	1254	.006	15	.006	1	.007	1	.006	17	.006	88	.002	337	.006	0	.0	0	.0	0	.0	0	.0
739	15444	.005	114	.001	11	.004	1	.007	1	.006	13	.005	88	.002	38	.001	9	.106	0	.0	0	.0	0	.0
740	15444	.005	182	.001	18	.007	1	.007	1	.006	20	.007	141	.003	62	.001	3	.035	0	.0	53	.033	9	.005
741	15444	.005	182	.001	18	.007	1	.007	1	.006	20	.007	141	.003	62	.001	0	.0	0	.0	53	.033	9	.005
742	15444	.005	159	.001	16	.006	1	.007	1	.006	18	.006	123	.003	54	.001	0	.0	0	.0	87	.055	79	.048
743	15444	.005	993	.005	23	.009	1	.007	2	.012	26	.009	334	.007	289	.005	0	.0	0	.0	35	.022	70	.043
744	15444	.005	655	.003	19	.008	1	.007	1	.006	22	.008	264	.006	195	.003	0	.0	0	.0	35	.022	70	.043
745	15444	.005	968	.005	19	.008	1	.007	1	.006	21	.008	229	.005	283	.005	0	.0	0	.0	34	.021	70	.043
746	15444	.005	1867	.009	21	.008	1	.007	2	.012	24	.009	264	.006	536	.009	0	.0	0	.0	35	.022	70	.043
747	15444	.005	3078	.015	59	.024	3	.022	4	.024	66	.024	616	.013	862	.014	0	.0	0	.0	34	.021	70	.043
748	15444	.005	4269	.021	116	.047	6	.044	8	.048	131	.047	1285	.027	1187	.020	0	.0	0	.0	0	.0	0	.0
749	15444	.005	3761	.018	46	.019	3	.022	3	.018	52	.019	264	.006	1011	.017	0	.0	0	.0	0	.0	0	.0
750	15444	.005	1510	.007	17	.007	1	.007	1	.006	20	.007	106	.002	408	.007	0	.0	0	.0	0	.0	0	.0
756	15444	.005	159	.001	16	.006	1	.007	1	.006	18	.006	123	.003	54	.001	3	.035	0	.0	0	.0	0	.0
757	15444	.005	182	.001	18	.007	1	.007	1	.006	20	.007	141	.003	62	.001	0	.0	0	.0	53	.033	9	.005
758	15444	.005	182	.001	18	.007	1	.007	1	.006	20	.007	141	.003	62	.001	0	.0	0	.0	56	.035	16	.010
759	15444	.005	291	.001	22	.009	1	.007	2	.012	25	.009	211	.004	97	.002	0	.0	0	.0	53	.033	9	.005
760	15444	.005	540	.003	25	.010	1	.007	2	.012	29	.010	299	.006	169	.003	0	.0	0	.0	0	.0	0	.0
761	15444	.005	545	.003	21	.008	1	.007	1	.006	24	.009	264	.006	167	.003	0	.0	0	.0	0	.0	0	.0
762	15444	.005	545	.003	21	.008	1	.007	1	.006	24	.009	264	.006	167	.003	0	.0	0	.0	0	.0	0	.0
763	15444	.005	838	.004	12	.005	1	.007	1	.006	14	.005	211	.004	241	.004	0	.0	0	.0	0	.0	0	.0
764	15444	.005	2122	.010	17	.007	1	.007	1	.006	19	.007	405	.009	597	.010	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
765	15444	.005	3499	.017	54	.022	3	.022	4	.024	60	.022	1531	.032	1033	.017	0	.0	0	.0	0	.0
766	15444	.005	3276	.016	37	.015	2	.015	3	.018	41	.015	229	.005	886	.015	0	.0	0	.0	0	.0
767	15444	.005	2033	.010	19	.008	1	.007	1	.006	21	.008	141	.003	557	.009	0	.0	0	.0	0	.0
768	15444	.005	768	.004	6	.002	0	.0	0	.0	7	.003	53	.001	213	.004	0	.0	0	.0	0	.0
773	15444	.005	114	.001	11	.004	1	.007	1	.006	13	.005	88	.002	38	.001	0	.0	0	.0	0	.0
774	15444	.005	182	.001	18	.007	1	.007	1	.006	20	.007	141	.003	62	.001	0	.0	0	.0	0	.0
775	15444	.005	245	.001	18	.007	1	.007	1	.006	20	.007	176	.004	81	.001	0	.0	0	.0	53	.033	9	.005
776	15444	.005	286	.001	15	.006	1	.007	1	.006	17	.006	194	.004	93	.002	0	.0	0	.0	53	.033	9	.005
777	15444	.005	336	.002	16	.006	1	.007	1	.006	18	.006	211	.004	108	.002	0	.0	0	.0	53	.033	9	.005
778	15444	.005	422	.002	15	.006	1	.007	1	.006	17	.006	211	.004	129	.002	0	.0	0	.0	0	.0	0	.0
779	15444	.005	976	.005	17	.007	1	.007	1	.006	19	.007	282	.006	283	.005	0	.0	0	.0	0	.0	0	.0
780	15444	.005	1751	.009	7	.003	0	.0	0	.0	8	.003	264	.006	489	.008	0	.0	0	.0	0	.0	0	.0
781	15444	.005	1751	.009	7	.003	0	.0	0	.0	8	.003	264	.006	489	.008	0	.0	0	.0	0	.0	0	.0
782	15444	.005	2759	.014	18	.007	1	.007	1	.006	21	.008	334	.007	762	.013	0	.0	0	.0	6	.004	0	.0
783	15444	.005	2132	.010	17	.007	1	.007	1	.006	20	.007	176	.004	587	.010	0	.0	0	.0	0	.0	0	.0
784	15444	.005	1793	.009	14	.006	1	.007	1	.006	15	.005	123	.003	496	.008	0	.0	0	.0	0	.0	0	.0
785	15444	.005	1281	.006	10	.004	0	.0	1	.006	11	.004	88	.002	354	.006	0	.0	0	.0	0	.0	0	.0
TOTAL	2810808		203450		2482		135		166		2788		47116		60205		85		6		1592		1643	

***EXECUTION TERMINATING NORMALLY. 92 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
376	413 .008	312 .010	77 .005	5 .012	19 .006	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
377	1220 .024	686 .022	488 .031	7 .017	38 .012	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
378	242 .005	176 .006	7 .000	10 .025	50 .015	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
379	435 .009	257 .008	112 .007	9 .022	57 .018	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
380	5620 .111	2837 .091	2569 .163	30 .074	185 .057	30 .065	4 .048	432 .072	35 .350	0 .0	0 .0	0 .0
381	1223 .024	760 .024	342 .022	54 .133	67 .021	0 .0	4 .048	432 .072	0 .0	0 .0	0 .0	0 .0
382	307 .006	188 .006	88 .006	12 .030	19 .006	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
400	146 .003	111 .004	27 .002	1 .002	7 .002	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
401	165 .033	129 .004	27 .002	1 .002	8 .002	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
402	5[illegible] .091	50 .002	3 .000	1 .002	5 .002	0 .0	0 .0	432 .072	0 .0	0 .0	0 .0	0 .0
403	373 .007	254 .008	87 .006	4 .010	28 .009	0 .0	4 .048	0 .0	0 .0	0 .0	0 .0	0 .0
404	2186 .043	1462 .047	634 .040	1 .002	89 .027	60 .130	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
405	2116 .042	1430 .046	584 .037	6 .015	96 .030	0 .0	4 .048	0 .0	0 .0	0 .0	0 .0	0 .0
406	1363 .027	704 .023	475 .030	2 .005	183 .056	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
407	923 .018	477 .015	321 .020	2 .005	123 .038	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
408	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
425	10 .000	7 .000	3 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
426	280 .006	195 .006	63 .004	2 .005	21 .006	30 .065	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
427	516 .010	367 .012	108 .007	2 .005	39 .012	20 .043	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
428	201 .004	117 .004	59 .004	2 .005	22 .007	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
429	179 .004	98 .003	60 .004	1 .002	21 .006	0 .0	4 .048	0 .0	0 .0	0 .0	0 .0	0 .0
430	57 .001	31 .001	19 .001	0 .0	7 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
448	72 .001	44 .001	20 .001	1 .002	8 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
449	187 .004	113 .004	51 .003	2 .005	20 .006	20 .043	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
450	260 .005	157 .005	71 .005	3 .007	28 .009	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
451	216 .004	126 .004	63 .004	2 .005	24 .007	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
452	71 .001	39 .001	24 .002	0 .0	8 .002	30 .065	4 .048	0 .0	0 .0	0 .0	0 .0	0 .0
468	72 .001	44 .001	20 .001	1 .002	8 .002	10 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
469	730 .014	343 .011	275 .017	43 .106	69 .021	30 .065	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
470	130 .003	78 .003	35 .002	2 .005	14 .004	10 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
695	189 .004	123 .004	58 .004	1 .002	8 .002	0 .0	2 .024	78 .013	0 .0	0 .0	0 .0	0 .0
696	294 .006	145 .005	135 .009	2 .005	12 .004	0 .0	2 .024	156 .026	0 .0	0 .0	0 .0	0 .0
697	773 .015	497 .016	179 .011	11 .027	85 .026	12 .026	4 .048	105 .018	0 .0	0 .0	0 .0	0 .0
707	120 .002	22 .001	97 .006	0 .0	1 .000	0 .0	4 .048	0 .0	0 .0	0 .0	0 .0	0 .0
708	260 .006	51 .002	226 .014	0 .0	3 .001	0 .0	2 .024	7 .001	0 .0	0 .0	0 .0	0 .0
709	200 .004	37 .001	161 .010	0 .0	2 .001	0 .0	2 .024	7 .001	0 .0	0 .0	0 .0	0 .0
710	627 .012	326 .011	283 .018	0 .0	16 .005	0 .0	2 .024	23 .004	0 .0	0 .0	0 .0	0 .0
711	701 .014	417 .013	258 .016	2 .005	25 .008	0 .0	2 .024	55 .009	0 .0	0 .0	0 .0	0 .0
712	482 .010	246 .008	213 .014	4 .010	20 .006	0 .0	0 .0	61 .010	0 .0	0 .0	0 .0	0 .0
713	697 .014	485 .016	178 .011	3 .007	32 .010	0 .0	0 .0	51 .009	0 .0	0 .0	0 .0	0 .0
714	2947 .058	2177 .070	530 .034	19 .047	220 .068	13 .028	0 .0	37 .006	0 .0	0 .0	0 .0	0 .0
715	1103 .022	744 .024	243 .015	12 .030	104 .032	0 .0	0 .0	15 .003	0 .0	0 .0	0 .0	0 .0
716	131 .003	92 .003	28 .002	1 .002	10 .003	0 .0	0 .0	2 .000	0 .0	0 .0	0 .0	0 .0
723	47 .001	33 .001	10 .001	1 .002	2 .001	0 .0	2 .024	1 .000	0 .0	0 .0	0 .0	0 .0
724	327 .006	84 .003	235 .015	1 .002	5 .002	0 .0	1 .012	5 .001	0 .0	0 .0	0 .0	0 .0
725	809 .016	153 .005	646 .041	0 .0	9 .003	6 .013	1 .012	14 .002	0 .0	0 .0	0 .0	0 .0
726	800 .016	147 .005	644 .041	0 .0	9 .003	17 .037	1 .012	14 .002	0 .0	0 .0	0 .0	0 .0
727	1255 .025	656 .021	567 .036	0 .0	31 .010	11 .024	1 .012	30 .005	0 .0	0 .0	0 .0	0 .0
728	866 .017	495 .016	335 .021	4 .010	31 .010	11 .024	1 .012	56 .009	0 .0	0 .0	0 .0	0 .0
729	509 .010	232 .007	251 .016	4 .010	21 .006	9 .020	1 .012	61 .010	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
730	2391	.047	1950	.063	294	.019	3	.007	145	.045	10	.022	1	.012	51	.009	0	.0	0	.0	0	.0
731	3503	.069	2977	.096	306	.019	3	.007	218	.067	10	.022	1	.012	10	.002	0	.0	0	.0	0	.0
732	980	.019	688	.022	207	.013	7	.017	78	.024	0	.0	1	.012	18	.003	0	.0	0	.0	0	.0
733	327	.006	229	.007	69	.004	2	.005	26	.008	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0
739	47	.001	33	.001	10	.001	1	.002	2	.001	0	.0	4	.048	3	.001	0	.0	0	.0	0	.0
740	75	.001	53	.002	15	.001	2	.005	4	.001	0	.0	1	.012	7	.001	0	.0	0	.0	0	.0
741	75	.001	53	.002	15	.001	2	.005	4	.001	10	.022	0	.0	7	.001	0	.0	0	.0	0	.0
742	66	.001	46	.001	13	.001	2	.005	3	.001	17	.037	1	.012	7	.001	0	.0	0	.0	0	.0
743	627	.012	130	.004	487	.031	1	.002	8	.002	0	.0	1	.012	12	.002	0	.0	0	.0	0	.0
744	240	.005	71	.002	162	.010	1	.002	5	.002	0	.0	1	.012	20	.003	0	.0	0	.0	0	.0
745	157	.003	88	.003	59	.004	2	.005	8	.002	8	.017	1	.012	19	.003	0	.0	0	.0	0	.0
746	341	.007	167	.005	155	.010	3	.007	15	.005	8	.017	1	.012	43	.007	0	.0	0	.0	0	.0
747	827	.016	534	.017	179	.011	4	.010	110	.034	3	.007	1	.012	65	.011	0	.0	0	.0	0	.0
748	1345	.027	984	.032	128	.008	4	.010	230	.071	10	.022	1	.012	24	.004	0	.0	0	.0	0	.0
749	980	.019	688	.022	207	.013	7	.017	78	.024	0	.0	1	.012	18	.003	0	.0	0	.0	0	.0
750	354	.007	246	.008	76	.005	3	.007	27	.008	0	.0	0	.0	10	.002	0	.0	0	.0	0	.0
756	66	.001	46	.001	13	.001	2	.005	3	.001	8	.017	0	.0	5	.001	0	.0	0	.0	0	.0
757	75	.001	53	.002	15	.001	2	.005	4	.001	18	.039	0	.0	7	.001	0	.0	0	.0	0	.0
758	75	.001	53	.002	15	.001	2	.005	4	.001	2	.004	2	.024	7	.001	0	.0	0	.0	0	.0
759	139	.003	102	.003	27	.002	3	.007	6	.002	0	.0	0	.0	7	.001	0	.0	0	.0	0	.0
760	132	.003	103	.003	18	.001	2	.005	7	.002	0	.0	2	.024	4	.001	0	.0	0	.0	0	.0
761	59	.001	51	.002	2	.000	2	.005	4	.001	0	.0	1	.012	19	.003	0	.0	0	.0	0	.0
762	59	.001	51	.002	2	.000	2	.005	4	.001	0	.0	1	.012	25	.004	0	.0	0	.0	0	.0
763	114	.002	67	.002	37	.002	1	.002	9	.003	0	.0	1	.012	50	.008	0	.0	0	.0	0	.0
764	379	.007	215	.007	132	.008	3	.007	29	.009	0	.0	1	.012	66	.011	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP	ALLOC	PROP
765	460	.013	403	.013	189	.012	6	.015	63	.019	17	.037	0	.0	41	.007	0	.0	0	.0	0	.0
766	735	.015	510	.016	161	.010	8	.020	56	.017	0	.0	0	.0	11	.002	0	.0	0	.0	0	.0
767	332	.007	222	.007	79	.005	7	.017	23	.007	0	.0	0	.0	3	.001	0	.0	0	.0	0	.0
768	62	.002	51	.002	23	.001	4	.010	4	.001	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
773	47	.001	33	.001	10	.001	1	.002	2	.001	2	.004	0	.0	3	.001	0	.0	0	.0	0	.0
774	75	.001	53	.002	15	.001	2	.005	4	.001	0	.0	0	.0	13	.002	0	.0	0	.0	0	.0
775	120	.002	89	.003	23	.001	2	.005	6	.002	0	.0	2	.024	7	.001	0	.0	0	.0	0	.0
776	156	.033	118	.004	29	.002	2	.005	7	.002	0	.0	1	.012	31	.005	0	.0	0	.0	0	.0
777	154	.003	118	.004	27	.002	2	.005	7	.002	0	.0	1	.012	7	.001	0	.0	0	.0	0	.0
778	51	.001	43	.001	1	.000	2	.005	5	.002	0	.0	1	.012	19	.003	0	.0	0	.0	0	.0
779	131	.003	82	.003	37	.002	2	.005	11	.003	0	.0	1	.012	36	.006	0	.0	0	.0	0	.0
780	258	.005	129	.004	107	.007	2	.005	20	.006	0	.0	1	.012	46	.008	0	.0	0	.0	0	.0
781	258	.005	129	.004	107	.007	2	.005	20	.006	0	.0	1	.012	65	.011	0	.0	0	.0	0	.0
782	481	.010	284	.009	156	.010	5	.012	37	.011	18	.039	0	.0	65	.011	65	.650	0	.0	0	.0
783	318	.006	202	.006	87	.006	7	.017	22	.007	0	.0	0	.0	23	.004	0	.0	0	.0	0	.0
784	190	.004	118	.004	53	.003	8	.020	10	.003	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0
785	136	.003	84	.003	38	.002	6	.015	7	.002	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0
TOTAL	50546		31102		15774		405		3244		460		84		5988		100		0		0	

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	CRP ACRS ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	FOR ACRS ALLOC #	PROP
376	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.033	0	.0	0	.0	0	.0	10	.009
377	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.055	0	.0	0	.0	0	.0	15	.013
378	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.038	0	.0	0	.0	0	.0	25	.022
379	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.044	0	.0	0	.0	0	.0	50	.045
380	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	20	.018
381	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	45	.049	0	.0	0	.0	0	.0	30	.027
382	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	15	.013
400	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.005	0	.0	0	.0	0	.0	0	.0
401	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.027	0	.0	0	.0	0	.0	0	.0
402	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.027	0	.0	0	.0	0	.0	30	.027
403	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.038	0	.0	0	.0	0	.0	30	.027
404	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.033	0	.0	0	.0	0	.0	30	.027
405	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.005	0	.0	0	.0	0	.0	75	.067
406	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	35	.031
407	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	35	.031
408	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
425	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.011	0	.0	0	.0	0	.0	15	.013
426	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.027	0	.0	0	.0	0	.0	30	.027
427	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	45	.040
428	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	50	.045
429	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	55	.049
430	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.011	0	.0	0	.0	0	.0	50	.045
448	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.022
449	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.018
450	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	0	.0	60	.054

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.									CRP ACRS				FOR ACRS	
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
451	0	.0	0	.0	0	.0	0	.0	0	.0	10	.011	0	.0	0	.0	65	.058
452	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.031
468	0	.0	0	.0	0	.0	0	.0	0	.0	10	.011	0	.0	0	.0	5	.004
469	0	.0	0	.0	0	.0	0	.0	0	.0	30	.033	0	.0	0	.0	30	.027
470	0	.0	0	.0	0	.0	0	.0	0	.0	20	.022	0	.0	0	.0	35	.031
695	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
696	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.004
697	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
707	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
708	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
709	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
710	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
711	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002
712	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002
713	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
714	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
715	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
716	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
723	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
724	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	4	.005
725	0	.0	0	.0	0	.0	0	.0	0	.0	3	.003	0	.0	0	.0	0	.0
726	0	.0	0	.0	0	.0	0	.0	0	.0	1	.001	0	.0	0	.0	0	.0
727	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002	0	.0	0	.0	0	.0
728	0	.0	0	.0	0	.0	0	.0	0	.0	6	.007	0	.0	0	.0	0	.0
729	0	.0	0	.0	0	.0	0	.0	0	.0	15	.016	0	.0	0	.0	5	.004

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
730	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.003	0	.0	0	.0	0	.0	0	.0
731	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.003	0	.0	0	.0	0	.0	0	.0
732	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.005	0	.0	0	.0	0	.0	8	.007
733	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002
739	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
740	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002	0	.0	0	.0	0	.0	4	.004
741	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.003	0	.0	0	.0	0	.0	10	.009
742	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.003	0	.0	0	.0	0	.0	10	.009
743	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.003	0	.0	0	.0	0	.0	0	.0
744	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	6	.007	0	.0	0	.0	0	.0	10	.009
745	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	6	.007	0	.0	0	.0	0	.0	10	.009
746	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	15	.016	0	.0	0	.0	0	.0	5	.004
747	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002	0	.0	0	.0	0	.0	0	.0
748	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.002	0	.0	0	.0	0	.0	0	.0
749	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.005	0	.0	0	.0	0	.0	12	.011
750	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	8	.007
756	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
757	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	8	.009	0	.0	0	.0	0	.0	0	.0
758	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	6	.007	0	.0	0	.0	0	.0	10	.009
759	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	5	.004
760	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	5	.004
761	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	0	.0
762	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	0	.0
763	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	8	.007
764	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.005	0	.0	0	.0	0	.0	4	.004

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	CRP ACRS ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	FOR ACRS ALLOC $	PROP
765	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	6	.007	0	.0	0	.0	0	.0
766	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	10	.009
767	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.011	0	.0	0	.0	2	.002
768	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
773	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
774	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	8	.009	0	.0	0	.0	0	.0
775	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	8	.009	0	.0	0	.0	0	.0
776	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	14	.015	0	.0	0	.0	0	.0	0	.0
777	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	5	.004
778	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	0	.0
779	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	14	.015	0	.0	0	.0	0	.0	0	.0
780	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	9	.010	0	.0	0	.0	0	.0	2	.002
781	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	9	.010	0	.0	0	.0	0	.0	6	.005
782	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.005	0	.0	0	.0	0	.0	10	.009
783	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	12	.013	0	.0	0	.0	0	.0	10	.009
784	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	8	.009	0	.0	0	.0	0	.0	9	.008
785	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	7	.008	0	.0	0	.0	0	.0	9	.008
TOTAL	0		0		0		0		0		0		910		0		0		0		1114	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
376	1760	467.0	4395.0
377	1760	472.0	4395.0
378	1760	477.0	4395.0
379	1760	482.0	4395.0
380	1760	487.0	4395.0
381	1760	492.0	4395.0
382	1760	497.0	4395.0
400	1760	467.0	4390.0
401	1760	472.0	4390.0
402	1760	477.0	4390.0
403	1760	482.0	4390.0
404	1760	487.0	4390.0
405	1760	492.0	4390.0
406	1760	497.0	4390.0
407	1760	502.0	4390.0
408	1760	507.0	4390.0
425	1760	482.0	4385.0
426	1760	487.0	4385.0
427	1760	492.0	4385.0
428	1760	497.0	4385.0
429	1760	502.0	4385.0
430	1760	507.0	4385.0
448	1760	487.0	4380.0
449	1760	492.0	4380.0
450	1760	497.0	4380.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
451	1760	502.0	4380.0
452	1760	507.0	4380.0
468	1760	492.0	4375.0
469	1760	497.0	4375.0
470	1760	502.0	4375.0
695	294 1760	482.0	4412.5
696	294 1760	484.5	4412.5
697	295 1760	487.0	4412.5
707	291 1760	469.5	4410.0
708	292 1760	472.0	4410.0
709	292 1760	474.5	4410.0
710	293 1760	477.0	4410.0
711	293 1760	479.5	4410.0
712	294 1760	482.0	4410.0
713	294 1760	484.5	4410.0
714	295 1760	487.0	4410.0
715	295 1760	489.5	4410.0
716	296 1760	492.0	4410.0
723	318 1760	467.0	4407.5
724	318 1760	469.5	4407.5
725	319 1760	472.0	4407.5
726	319 1760	474.5	4407.5
727	320 1760	477.0	4407.5
728	320 1760	479.5	4407.5
729	321 1760	482.0	4407.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
730	321 1760	484.5	4407.5
731	322 1760	487.0	4407.5
732	322 1760	489.5	4407.5
733	323 1760	492.0	4407.5
739	317 1760	464.5	4405.0
740	318 1760	467.0	4405.0
741	318 1760	469.5	4405.0
742	319 1760	472.0	4405.0
743	319 1760	474.5	4405.0
744	320 1760	477.0	4405.0
745	320 1760	479.5	4405.0
746	321 1760	482.0	4405.0
747	321 1760	484.5	4405.0
748	322 1760	487.0	4405.0
749	322 1760	489.5	4405.0
750	323 1760	492.0	4405.0
756	346 1760	464.5	4402.5
757	347 1760	467.0	4402.5
758	347 1760	469.5	4402.5
759	348 1760	472.0	4402.5
760	348 1760	474.5	4402.5
761	349 1760	477.0	4402.5
762	349 1760	479.5	4402.5
763	350 1760	482.0	4402.5
764	350 1760	484.5	4402.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
765	351 1760	487.0	4402.5
766	351 1760	489.5	4402.5
767	352 1760	492.0	4402.5
768	352 1760	494.5	4402.5
773	346 1760	464.5	4400.0
774	347 1760	467.0	4400.0
775	347 1760	469.5	4400.0
776	348 1760	472.0	4400.0
777	348 1760	474.5	4400.0
778	349 1760	477.0	4400.0
779	349 1760	479.5	4400.0
780	350 1760	482.0	4400.0
781	350 1760	484.5	4400.0
782	351 1760	487.0	4400.0
783	351 1760	489.5	4400.0
784	352 1760	492.0	4400.0
785	352 1760	494.5	4400.0

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - MONTGOMERY COUNTY PA

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VHT	MISC	OTHER
	HHHHHH	HHHHHH	0000006Q				O R	JKL	IIIS	QP	06QH	TU	06 HR

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES.
NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
21	61776	.015	1933	.003	10	.001	1	.002	1	.002	11	.001	420	.004	62	.003	0	.0	0	.0	0	.0	0	.0
22	61776	.015	6160	.010	63	.008	2	.005	3	.006	68	.008	1428	.013	205	.010	0	.0	0	.0	2	.008	0	.0
23	61776	.015	273	.000	1	.000	0	.0	0	.0	1	.000	60	.001	8	.000	0	.0	0	.0	0	.0	0	.0
32	61776	.015	735	.001	1	.000	1	.002	1	.002	1	.000	300	.003	22	.001	0	.0	0	.0	0	.0	0	.0
33	61776	.015	1761	.003	10	.001	1	.002	1	.002	11	.001	390	.003	53	.003	0	.0	0	.0	0	.0	0	.0
34	61776	.015	3101	.005	24	.003	2	.005	2	.004	26	.003	900	.008	99	.005	0	.0	0	.0	0	.0	0	.0
35	61776	.015	1366	.002	29	.004	2	.005	2	.004	33	.004	390	.003	41	.002	0	.0	0	.0	0	.0	0	.0
36	61776	.015	274	.000	18	.002	1	.002	1	.002	20	.002	120	.001	8	.000	0	.0	0	.0	0	.0	0	.0
48	61776	.015	969	.002	10	.001	0	.0	1	.002	11	.001	180	.002	33	.002	0	.0	0	.0	0	.0	0	.0
49	61776	.015	3979	.006	45	.006	2	.005	3	.006	51	.006	660	.006	136	.007	0	.0	0	.0	5	.020	3	.004
50	61776	.015	1482	.002	10	.001	1	.002	1	.002	11	.001	330	.003	45	.002	0	.0	0	.0	0	.0	0	.0
51	61776	.015	2405	.004	34	.004	2	.005	2	.004	37	.004	1080	.010	74	.004	0	.0	0	.0	0	.0	0	.0
52	61776	.015	1804	.003	63	.008	4	.010	5	.011	71	.008	600	.005	54	.003	0	.0	0	.0	0	.0	0	.0
53	61776	.015	5084	.008	57	.007	4	.010	5	.011	65	.008	1038	.009	153	.007	0	.0	0	.0	0	.0	0	.0
54	61776	.015	9197	.014	33	.004	3	.007	3	.006	37	.004	1698	.015	310	.015	0	.0	0	.0	0	.0	0	.0
67	61776	.015	22681	.035	99	.013	7	.017	8	.017	109	.013	4428	.040	795	.038	0	.0	1	.077	34	.135	93	.127
68	61776	.015	10481	.016	52	.007	4	.010	4	.008	58	.007	1710	.015	327	.016	0	.0	0	.0	0	.0	0	.0
69	61776	.015	2149	.003	23	.003	1	.002	2	.004	25	.003	570	.005	66	.003	0	.0	1	.077	14	.056	75	.102
70	61776	.015	4228	.007	59	.008	2	.005	2	.004	64	.008	1422	.013	131	.006	0	.0	0	.0	0	.0	0	.0
71	61776	.015	3863	.006	27	.004	2	.005	2	.004	30	.004	708	.006	115	.006	0	.0	0	.0	0	.0	0	.0
72	61776	.015	5127	.008	64	.008	4	.010	4	.008	71	.008	834	.007	151	.007	0	.0	0	.0	0	.0	0	.0
73	61776	.015	17252	.027	107	.014	6	.015	6	.013	116	.014	2772	.025	573	.028	0	.0	0	.0	0	.0	0	.0
74	61776	.015	6066	.009	79	.010	4	.010	4	.008	88	.010	690	.006	201	.010	0	.0	0	.0	0	.0	0	.0
75	61776	.015	229	.000	6	.001	0	.0	0	.0	7	.001	60	.001	7	.000	0	.0	0	.0	0	.0	0	.0
88	61776	.015	143	.000	0	.0	0	.0	0	.0	0	.0	60	.001	5	.000	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
89	61776	.015	3110	.005	42	.006	2	.005	3	.006	45	.005	1002	.009	110	.005	0	.0	0	.0	0	.0	0	.0
90	61776	.015	4908	.008	54	.007	3	.007	3	.006	60	.007	840	.008	164	.008	0	.0	0	.0	0	.0	0	.0
91	61776	.015	2195	.003	32	.004	2	.005	2	.004	35	.004	378	.003	68	.003	0	.0	1	.077	20	.079	112	.152
92	61776	.015	4836	.007	48	.006	3	.007	3	.006	53	.006	1062	.010	141	.007	0	.0	0	.0	0	.0	0	.0
93	61776	.015	4640	.007	37	.005	2	.005	2	.004	42	.005	1020	.009	100	.005	0	.0	0	.0	8	.032	28	.038
94	61776	.015	4176	.006	35	.005	2	.005	2	.004	40	.005	540	.005	128	.006	0	.0	0	.0	0	.0	0	.0
95	61776	.015	24084	.037	258	.034	14	.035	17	.036	286	.034	4050	.036	816	.039	0	.0	0	.0	0	.0	0	.0
96	61776	.015	12685	.020	214	.028	11	.027	13	.027	239	.028	2268	.020	417	.020	0	.0	0	.0	14	.056	47	.064
97	61776	.015	2658	.004	42	.006	3	.007	3	.006	47	.006	690	.006	89	.004	0	.0	0	.0	21	.083	70	.095
98	61776	.015	967	.001	20	.003	1	.002	1	.002	22	.003	432	.004	23	.001	0	.0	0	.0	0	.0	0	.0
113	61776	.015	118	.000	2	.000	0	.0	0	.0	2	.000	18	.000	4	.000	0	.0	0	.0	0	.0	0	.0
114	61776	.015	6852	.011	47	.006	3	.007	3	.006	51	.006	1452	.013	232	.011	0	.0	0	.0	0	.0	0	.0
115	61776	.015	7245	.011	80	.010	4	.010	5	.011	89	.010	1260	.011	208	.010	0	.0	0	.0	0	.0	0	.0
116	61776	.015	5809	.009	56	.007	3	.007	3	.006	63	.007	960	.009	180	.009	0	.0	0	.0	7	.028	28	.038
117	61776	.015	3904	.006	54	.007	3	.007	4	.008	61	.007	570	.005	111	.005	0	.0	0	.0	0	.0	0	.0
118	61776	.015	5777	.009	124	.016	6	.015	8	.017	139	.016	1260	.011	159	.008	0	.0	0	.0	0	.0	0	.0
119	61776	.015	9655	.015	193	.025	11	.027	13	.027	218	.026	2232	.020	308	.015	0	.0	0	.0	0	.0	0	.0
120	61776	.015	7839	.012	89	.012	5	.012	6	.013	100	.012	1110	.010	209	.010	0	.0	0	.0	0	.0	0	.0
121	61776	.015	23327	.036	262	.034	13	.032	15	.032	288	.034	3468	.031	741	.036	0	.0	0	.0	0	.0	0	.0
122	61776	.015	7197	.011	175	.023	8	.020	10	.021	194	.023	1350	.012	212	.010	0	.0	0	.0	0	.0	0	.0
137	61776	.015	489	.001	4	.001	0	.0	0	.0	5	.001	60	.001	14	.001	0	.0	0	.0	0	.0	0	.0
138	61776	.015	5053	.008	53	.007	3	.007	3	.006	59	.007	618	.006	156	.008	0	.0	0	.0	0	.0	0	.0
162	61776	.015	881	.001	34	.004	2	.005	2	.004	37	.004	210	.002	26	.001	0	.0	0	.0	0	.0	0	.0
501	15444	.004	4494	.007	60	.008	3	.007	4	.008	66	.008	762	.007	138	.007	0	.0	0	.0	0	.0	0	.0
502	15444	.004	8211	.013	40	.005	2	.005	2	.004	45	.005	1050	.009	273	.013	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.	AREA		POPULATN								HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
503	15444	.004	24679	.038	140	.018	8	.020	6	.017	151	.016	3210	.029	622	.040	0	.0	0	.0	0	.0	0	.0
504	15444	.004	10944	.017	68	.009	3	.007	4	.008	75	.009	1350	.012	342	.017	0	.0	0	.0	0	.0	0	.0
505	15444	.004	6140	.010	105	.014	5	.012	7	.015	117	.014	1140	.010	174	.008	0	.0	2	.154	25	.099	56	.076
506	15444	.004	2311	.004	56	.007	3	.007	4	.008	63	.007	360	.003	66	.003	0	.0	3	.231	38	.151	83	.113
507	15444	.004	814	.001	43	.006	2	.005	3	.006	49	.006	180	.002	26	.001	0	.0	0	.0	0	.0	0	.0
508	15444	.004	4916	.008	95	.012	5	.012	6	.013	106	.012	780	.007	149	.007	0	.0	0	.0	0	.0	0	.0
509	15444	.004	5040	.008	66	.009	4	.010	4	.008	74	.009	960	.009	145	.007	0	.0	0	.0	0	.0	0	.0
510	15444	.004	16240	.025	78	.010	6	.015	6	.013	87	.010	2460	.022	468	.023	0	.0	0	.0	0	.0	0	.0
511	15444	.004	11146	.017	114	.015	5	.012	7	.015	125	.015	1680	.015	357	.017	0	.0	0	.0	0	.0	0	.0
512	15444	.004	3522	.005	40	.005	2	.005	2	.004	44	.005	810	.007	117	.006	0	.0	0	.0	0	.0	0	.0
513	15444	.004	2393	.004	62	.008	3	.007	4	.008	69	.008	720	.006	71	.003	0	.0	0	.0	0	.0	0	.0
514	15444	.004	1731	.003	18	.002	1	.002	1	.002	20	.002	270	.002	51	.002	0	.0	0	.0	0	.0	0	.0
518	15444	.004	2641	.004	40	.005	2	.005	3	.006	44	.005	390	.003	68	.003	0	.0	0	.0	0	.0	0	.0
519	15444	.004	9258	.014	51	.007	3	.007	3	.006	57	.007	1020	.009	264	.013	0	.0	0	.0	0	.0	0	.0
520	15444	.004	10796	.017	142	.019	7	.017	8	.017	159	.019	1860	.017	366	.016	0	.0	0	.0	0	.0	0	.0
521	15444	.004	3376	.005	42	.006	2	.005	3	.006	48	.006	570	.005	110	.005	0	.0	0	.0	0	.0	0	.0
522	15444	.004	4538	.007	118	.015	6	.015	8	.017	133	.016	990	.009	138	.006	0	.0	0	.0	0	.0	0	.0
523	15444	.004	2570	.004	76	.010	4	.010	5	.011	85	.010	510	.005	76	.004	0	.0	0	.0	0	.0	0	.0
524	15444	.004	3342	.005	84	.011	5	.012	6	.013	94	.011	600	.005	98	.005	0	.0	0	.0	0	.0	0	.0
525	15444	.004	6925	.011	89	.012	4	.010	6	.013	98	.012	960	.009	204	.010	0	.0	0	.0	0	.0	0	.0
526	15444	.004	9488	.015	113	.015	6	.015	6	.013	124	.015	1620	.015	304	.015	0	.0	0	.0	0	.0	0	.0
527	15444	.004	16924	.026	153	.020	7	.017	8	.017	168	.020	2310	.021	596	.029	0	.0	0	.0	0	.0	0	.0
528	15444	.004	7472	.012	74	.010	3	.007	4	.008	81	.010	1110	.010	264	.013	0	.0	0	.0	0	.0	0	.0
529	15444	.004	4681	.007	24	.003	1	.002	1	.002	26	.003	570	.005	150	.007	0	.0	0	.0	0	.0	0	.0
530	15444	.004	1128	.002	23	.003	1	.002	1	.002	25	.003	240	.002	34	.002	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.	AREA		POPULATN								HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
535	15444	.004	501	.001	39	.005	2	.005	2	.004	43	.005	240	.002	15	.001	0	.0	0	.0	0	.0	0	.0
536	15444	.004	5611	.009	217	.028	12	.030	14	.029	243	.029	1350	.012	196	.009	0	.0	0	.0	0	.0	0	.0
537	15444	.004	3700	.006	84	.011	4	.010	5	.011	93	.011	768	.007	137	.007	0	.0	0	.0	0	.0	0	.0
538	15444	.004	7575	.012	256	.034	12	.030	16	.034	284	.033	1758	.016	244	.012	0	.0	0	.0	0	.0	0	.0
539	15444	.004	8235	.013	79	.010	5	.012	6	.013	89	.010	1380	.012	275	.013	0	.0	0	.0	0	.0	0	.0
540	15444	.004	3620	.006	43	.006	2	.005	3	.006	48	.006	600	.005	105	.005	0	.0	0	.0	0	.0	0	.0
541	15444	.004	1291	.002	19	.002	1	.002	1	.002	21	.002	210	.002	37	.002	0	.0	0	.0	0	.0	0	.0
542	15444	.004	3636	.006	16	.002	1	.002	1	.002	18	.002	480	.004	118	.006	0	.0	0	.0	0	.0	0	.0
543	15444	.004	3414	.005	27	.004	2	.005	2	.004	30	.004	420	.004	125	.006	0	.0	0	.0	0	.0	0	.0
544	15444	.004	10208	.016	116	.015	5	.012	7	.015	126	.015	1980	.018	420	.020	0	.0	0	.0	0	.0	0	.0
545	15444	.004	7661	.012	79	.010	3	.007	4	.008	87	.010	1140	.010	241	.012	0	.0	0	.0	0	.0	0	.0
546	15444	.004	4105	.006	32	.004	1	.002	2	.004	35	.004	840	.008	150	.007	0	.0	0	.0	0	.0	0	.0
552	15444	.004	112	.000	3	.000	0	.0	0	.0	4	.000	30	.000	3	.000	0	.0	0	.0	0	.0	0	.0
554	15444	.004	1999	.003	52	.007	3	.007	3	.006	58	.007	492	.004	61	.003	0	.0	0	.0	0	.0	0	.0
555	15444	.004	2853	.004	89	.012	5	.012	6	.013	100	.012	492	.004	86	.004	0	.0	0	.0	0	.0	0	.0
556	15444	.004	1736	.003	56	.007	3	.007	4	.008	63	.007	210	.002	50	.002	0	.0	0	.0	0	.0	0	.0
557	15444	.004	1474	.002	25	.003	2	.005	2	.004	29	.003	210	.002	42	.002	0	.0	0	.0	0	.0	0	.0
561	15444	.004	1628	.003	6	.001	0	.0	0	.0	6	.001	210	.002	55	.003	0	.0	0	.0	0	.0	0	.0
562	15444	.004	7535	.012	31	.004	2	.005	2	.004	34	.004	1170	.010	243	.012	0	.0	0	.0	0	.0	0	.0
563	15444	.004	1273	.002	7	.001	0	.0	0	.0	8	.001	150	.001	44	.002	0	.0	0	.0	0	.0	0	.0
571	15444	.004	407	.001	7	.001	0	.0	0	.0	8	.001	60	.001	12	.001	0	.0	0	.0	0	.0	0	.0
572	15444	.004	6765	.010	81	.011	4	.010	5	.011	90	.011	1260	.011	244	.012	0	.0	0	.0	0	.0	0	.0
573	15444	.004	3071	.005	54	.007	3	.007	4	.008	60	.007	540	.005	116	.006	0	.0	0	.0	0	.0	0	.0
574	15444	.004	4777	.007	66	.009	4	.010	4	.008	73	.009	510	.005	153	.007	0	.0	0	.0	0	.0	0	.0
575	15444	.004	1562	.002	23	.003	1	.002	2	.004	26	.003	150	.001	52	.003	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.	AREA #	AREA ALLOC PROP	POPULATN #	POPULATN ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	HOUSES #	HOUSES ALLOC PROP	COMM VSL #	COMM VSL ALLOC PROP	MIL AIR #	MIL AIR ALLOC PROP	CIVL AIR #	CIVL AIR ALLOC PROP	COMM AIR #	COMM AIR ALLOC PROP
589	15444	.004	2098	.003	28	.004	1	.002	1	.002	31	.004	540	.005	85	.004	0	.0	0	.0	0	.0
590	15444	.004	8146	.013	84	.011	4	.010	4	.008	92	.011	1410	.013	332	.016	0	.0	0	.0	0	.0
591	15444	.004	10382	.016	62	.008	3	.007	3	.006	68	.008	1320	.012	366	.018	0	.0	0	.0	0	.0
592	15444	.004	7093	.011	85	.011	5	.012	5	.011	95	.011	1260	.011	237	.011	0	.0	0	.0	0	.0
593	15444	.004	103	.000	1	.000	0	.0	0	.0	1	.000	30	.000	4	.000	0	.0	0	.0	0	.0
607	15444	.004	6717	.010	79	.010	3	.007	5	.011	88	.010	960	.009	229	.011	0	.0	0	.0	0	.0
608	15444	.004	6788	.011	50	.007	2	.005	3	.006	55	.006	750	.007	231	.011	0	.0	0	.0	0	.0
609	15444	.004	659	.001	4	.001	0	.0	0	.0	5	.001	90	.001	21	.001	0	.0	0	.0	0	.0
790	15444	.004	2734	.004	31	.004	1	.002	2	.004	35	.004	390	.003	81	.004	0	.0	0	.0	0	.0
791	15444	.004	3841	.006	47	.006	2	.005	3	.006	54	.006	600	.005	116	.006	0	.0	0	.0	0	.0
792	15444	.004	3708	.006	29	.004	2	.005	2	.004	32	.004	510	.005	111	.005	0	.0	0	.0	0	.0
793	15444	.004	3668	.006	33	.004	2	.005	2	.004	38	.004	720	.006	76	.004	0	.0	0	.0	0	.0
794	15444	.004	5263	.008	68	.009	3	.007	4	.008	75	.009	870	.008	165	.008	0	.0	0	.0	0	.0
795	15444	.004	1830	.003	28	.004	1	.002	2	.004	31	.004	300	.003	48	.002	0	.0	2	.154	26	.103
796	15444	.004	1401	.002	28	.004	2	.005	2	.004	32	.004	360	.003	39	.002	0	.0	3	.231	38	.151
797	15444	.004	7134	.011	81	.011	5	.012	5	.011	92	.011	1230	.011	228	.011	0	.0	0	.0	0	.0
798	15444	.004	2439	.004	37	.005	2	.005	2	.004	42	.005	450	.004	75	.004	0	.0	0	.0	0	.0
799	15444	.004	2052	.003	19	.002	1	.002	1	.002	21	.002	300	.003	55	.003	0	.0	0	.0	0	.0
800	15444	.004	5900	.009	88	.012	5	.012	6	.013	99	.012	732	.007	168	.008	0	.0	0	.0	0	.0
801	15444	.004	9376	.015	195	.026	10	.025	12	.025	217	.026	1728	.015	297	.014	0	.0	0	.0	0	.0
802	15444	.004	2313	.004	20	.003	1	.002	1	.002	22	.003	510	.005	69	.003	0	.0	0	.0	0	.0
803	15444	.004	4270	.007	44	.006	2	.005	3	.006	50	.006	720	.006	113	.005	0	.0	0	.0	0	.0
804	15444	.004	1649	.003	15	.002	1	.002	1	.002	16	.002	240	.002	48	.002	0	.0	0	.0	0	.0
808	15444	.004	3261	.005	38	.005	1	.002	2	.004	42	.005	450	.004	98	.005	0	.0	0	.0	0	.0
809	15444	.004	784	.001	40	.005	2	.005	2	.004	44	.005	240	.002	24	.001	0	.0	0	.0	0	.0
TOTAL	4154436		645819		7634		401		476		8487		111540		20695		0		13		252		735	

***EXECUTION TERMINATING NORMALLY. 125 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP
21	552 .002	140 .001	381 .004	2 .001	29 .001	10 .007	4 .056	1544 .099	0 .0	0 .0	0 .0	0 .0
22	3114 .010	1388 .007	1621 .015	5 .002	102 .004	30 .021	4 .056	1544 .099	0 .0	0 .0	0 .0	0 .0
23	28 .000	17 .000	2 .000	3 .001	5 .000	0 .0	4 .056	1544 .099	0 .0	0 .0	0 .0	0 .0
32	63 .000	13 .000	45 .000	2 .001	4 .000	0 .0	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
33	335 .001	175 .001	126 .001	2 .001	33 .001	0 .0	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
34	1118 .003	484 .003	567 .005	20 .010	44 .002	30 .021	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
35	138 .000	92 .000	11 .000	12 .006	19 .001	0 .0	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
36	27 .000	23 .000	4 .000	0 .0	1 .000	0 .0	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
48	170 .001	103 .001	45 .000	1 .000	20 .001	0 .0	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
49	883 .003	580 .003	222 .002	0 .0	79 .003	0 .0	0 .0	1544 .099	0 .0	0 .0	0 .0	0 .0
50	246 .001	206 .001	11 .000	0 .0	29 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
51	371 .001	161 .001	166 .002	9 .004	34 .001	35 .025	4 .056	0 .0	0 .0	0 .0	0 .0	0 .0
52	389 .001	222 .001	124 .001	4 .002	39 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
53	1184 .004	678 .004	346 .003	3 .001	157 .005	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
54	2806 .009	1693 .010	698 .006	1 .000	215 .007	30 .021	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
67	11572 .036	6338 .034	4578 .042	15 .007	640 .022	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
68	2955 .009	1135 .006	1595 .015	27 .013	194 .007	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
69	490 .002	266 .001	171 .002	2 .001	49 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
70	831 .003	538 .003	216 .002	8 .004	75 .003	35 .025	4 .056	0 .0	0 .0	0 .0	0 .0	0 .0
71	1039 .003	764 .004	199 .002	6 .003	69 .002	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
72	1319 .004	879 .005	323 .003	6 .003	112 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
73	7994 .025	2115 .011	5271 .049	42 .021	567 .020	40 .029	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
74	3216 .010	1515 .008	1412 .013	5 .002	271 .009	25 .018	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
75	385 .001	113 .001	266 .002	0 .0	2 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
88	23 .000	16 .000	7 .000	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
89	7430	.023	3458	.019	3901	.036	0	.0	71	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
90	5723	.018	1628	.010	3620	.034	25	.012	246	.009	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
91	851	.003	365	.002	302	.003	6	.003	179	.006	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
92	922	.003	442	.002	399	.004	8	.004	70	.002	30	.021	4	.056	0	.0	0	.0	0	.0	0	.0
93	804	.002	654	.004	79	.001	2	.001	69	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
94	663	.002	331	.002	272	.003	2	.001	59	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
95	13903	.043	3935	.021	9516	.088	21	.010	430	.015	60	.043	0	.0	0	.0	0	.0	0	.0	0	.0
96	7849	.024	3092	.017	4435	.041	19	.009	291	.010	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
97	1343	.004	647	.003	652	.006	7	.003	30	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
98	554	.002	453	.002	93	.001	2	.001	7	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
113	51	.000	21	.000	18	.000	0	.0	11	.000	0	.0	4	.056	0	.0	0	.0	0	.0	0	.0
114	2800	.009	973	.005	1730	.016	14	.007	84	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
115	2455	.008	1165	.006	1156	.011	20	.010	114	.004	35	.025	4	.056	0	.0	0	.0	0	.0	0	.0
116	1703	.005	722	.004	841	.008	22	.011	117	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
117	821	.003	454	.002	253	.002	7	.003	88	.003	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
118	2842	.009	1464	.008	1207	.011	23	.011	149	.005	40	.029	0	.0	0	.0	0	.0	0	.0	0	.0
119	4423	.014	2376	.013	1530	.014	95	.047	424	.015	30	.021	0	.0	0	.0	0	.0	0	.0	0	.0
120	3648	.011	1319	.007	2038	.019	51	.025	240	.008	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
121	10800	.033	5645	.030	4402	.041	73	.036	682	.024	40	.029	0	.0	0	.0	0	.0	0	.0	0	.0
122	1881	.006	410	.002	1275	.012	43	.021	153	.005	30	.021	0	.0	0	.0	0	.0	0	.0	0	.0
137	230	.001	43	.000	180	.002	2	.001	4	.000	0	.0	4	.056	0	.0	0	.0	0	.0	0	.0
138	2914	.009	389	.002	2471	.023	9	.004	45	.002	20	.014	4	.056	0	.0	0	.0	0	.0	0	.0
162	1808	.006	1014	.005	784	.007	6	.003	4	.000	0	.0	4	.056	0	.0	0	.0	0	.0	0	.0
501	2685	.008	1228	.007	1273	.012	1	.000	183	.006	15	.011	4	.056	4	.000	0	.0	0	.0	0	.0
502	2606	.008	1814	.010	600	.006	0	.0	192	.007	40	.029	2	.028	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
503	11953	.037	9391	.050	2090	.019	5	.002	465	.016	30	.021	2	.028	0	.0	0	.0	0	.0	0	.0
504	3164	.010	2022	.011	811	.008	10	.005	312	.011	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
505	2971	.009	2056	.011	406	.004	10	.005	496	.017	0	.0	0	.0	6	.000	0	.0	0	.0	0	.0
506	2494	.008	1647	.009	578	.005	20	.010	247	.009	0	.0	0	.0	6	.000	0	.0	0	.0	0	.0
507	734	.002	325	.002	344	.003	4	.002	59	.002	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
508	3281	.010	1371	.007	1617	.015	9	.004	265	.010	30	.021	0	.0	1	.000	0	.0	0	.0	0	.0
509	1659	.005	877	.005	405	.004	3	.001	374	.013	15	.011	0	.0	0	.0	0	.0	0	.0	0	.0
510	1855	.006	1475	.008	22	.000	57	.028	301	.010	11	.008	0	.0	2	.000	0	.0	0	.0	0	.0
511	4223	.013	3574	.019	101	.001	30	.015	518	.018	7	.005	0	.0	2	.000	0	.0	0	.0	0	.0
512	1031	.003	762	.004	70	.001	10	.005	185	.006	30	.021	0	.0	11	.001	0	.0	0	.0	0	.0
513	2962	.009	1062	.006	1666	.015	9	.004	224	.008	10	.007	0	.0	10	.001	0	.0	0	.0	0	.0
514	559	.002	238	.001	268	.002	1	.000	53	.002	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
518	2905	.009	1523	.008	1045	.010	0	.0	337	.012	10	.007	2	.028	5	.000	0	.0	0	.0	0	.0
519	2892	.009	1833	.010	349	.003	14	.007	691	.024	0	.0	0	.0	5	.000	0	.0	0	.0	0	.0
520	12122	.037	7086	.038	4262	.040	10	.005	708	.025	60	.043	2	.028	2	.000	0	.0	0	.0	0	.0
521	5366	.016	2533	.014	2578	.024	2	.001	223	.008	60	.043	2	.028	0	.0	0	.0	0	.0	0	.0
522	3341	.010	1521	.008	1472	.014	3	.001	327	.011	35	.025	0	.0	0	.0	0	.0	0	.0	0	.0
523	977	.003	642	.003	215	.002	4	.002	115	.004	32	.023	0	.0	0	.0	0	.0	0	.0	0	.0
524	1160	.004	782	.004	245	.002	11	.005	122	.004	18	.013	0	.0	2	.000	0	.0	0	.0	0	.0
525	1989	.006	1202	.006	156	.001	20	.010	611	.021	0	.0	0	.0	5	.000	0	.0	0	.0	0	.0
526	4598	.014	2499	.013	565	.005	52	.026	1474	.051	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
527	11549	.036	9371	.050	624	.006	259	.127	1296	.045	20	.014	0	.0	1	.000	0	.0	0	.0	0	.0
528	3593	.011	2891	.016	175	.002	130	.064	397	.014	14	.010	0	.0	2	.000	0	.0	0	.0	0	.0
529	1180	.004	908	.005	3	.000	8	.004	260	.009	18	.013	0	.0	2	.000	0	.0	0	.0	0	.0
530	1411	.004	541	.003	743	.007	5	.002	123	.004	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP	ALLOC # PROP
535	1813 .006	1029 .006	778 .007	1 .000	6 .000	20 .014	0 .0	7 .000	0 .0	0 .0	0 .0	0 .0
536	4005 .012	1683 .009	2192 .020	8 .004	121 .004	40 .029	0 .0	11 .001	0 .0	0 .0	0 .0	0 .0
537	3322 .010	1226 .007	1932 .018	10 .005	146 .005	40 .029	0 .0	8 .001	0 .0	0 .0	0 .0	0 .0
538	6379 .020	2351 .013	3029 .028	6 .003	991 .034	90 .064	2 .028	0 .0	0 .0	0 .0	0 .0	0 .0
539	4214 .013	863 .005	3032 .028	15 .007	305 .011	35 .025	2 .028	0 .0	0 .0	0 .0	0 .0	0 .0
540	1247 .004	627 .003	465 .004	20 .010	135 .005	0 .0	0 .0	1 .000	0 .0	0 .0	0 .0	0 .0
541	389 .001	296 .002	28 .000	5 .002	59 .002	0 .0	0 .0	2 .000	0 .0	0 .0	0 .0	0 .0
542	1519 .005	343 .002	503 .005	1 .000	672 .023	0 .0	0 .0	4 .000	0 .0	0 .0	0 .0	0 .0
543	2117 .007	1640 .009	189 .002	4 .002	284 .010	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
544	3501 .011	3055 .016	140 .001	48 .020	267 .009	16 .011	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
545	5150 .016	4245 .023	472 .004	41 .020	391 .014	0 .0	0 .0	1 .000	0 .0	0 .0	0 .0	0 .0
546	1317 .004	900 .005	296 .003	17 .008	105 .004	7 .005	0 .0	1 .000	0 .0	0 .0	0 .0	0 .0
552	8 .000	7 .000	0 .0	0 .0	1 .000	0 .0	0 .0	3 .000	0 .0	0 .0	0 .0	0 .0
554	491 .002	385 .002	60 .001	2 .001	43 .001	0 .0	0 .0	6 .000	0 .0	0 .0	0 .0	0 .0
555	1414 .004	652 .003	585 .005	4 .002	172 .006	0 .0	0 .0	1 .000	0 .0	0 .0	0 .0	0 .0
556	314 .001	216 .001	63 .001	4 .002	30 .001	0 .0	2 .028	2 .000	0 .0	0 .0	0 .0	0 .0
557	434 .001	176 .001	223 .002	9 .004	27 .001	5 .004	2 .028	0 .0	0 .0	0 .0	0 .0	0 .0
561	692 .002	650 .003	10 .000	0 .0	31 .001	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
562	2884 .009	2399 .013	148 .001	0 .0	338 .012	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
563	738 .002	554 .003	62 .001	0 .0	123 .004	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
571	120 .000	99 .001	8 .000	1 .000	12 .000	0 .0	0 .0	2 .000	0 .0	0 .0	0 .0	0 .0
572	3356 .010	2958 .016	144 .001	15 .007	236 .008	0 .0	0 .0	3 .000	0 .0	0 .0	0 .0	0 .0
573	1977 .006	1784 .010	57 .001	13 .006	122 .004	0 .0	0 .0	3 .000	0 .0	0 .0	0 .0	0 .0
574	1400 .004	955 .005	291 .003	17 .008	137 .005	2 .001	2 .028	2 .000	0 .0	0 .0	0 .0	0 .0
575	454 .001	267 .001	132 .001	1 .000	56 .002	3 .002	2 .028	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
589	2542	.008	2202	.012	113	.001	40	.020	186	.006	8	.006	0	.0	3	.000	0	.0	0	.0	0	.0
590	8747	.027	6815	.037	415	.004	76	.037	1428	.050	22	.016	0	.0	3	.000	0	.0	0	.0	0	.0
591	4587	.014	3802	.020	163	.002	98	.048	521	.018	10	.007	0	.0	3	.000	0	.0	0	.0	0	.0
592	12375	.038	9952	.053	917	.009	19	.009	1488	.052	12	.009	0	.0	2	.000	0	.0	0	.0	0	.0
593	536	.002	465	.002	40	.000	0	.0	32	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
607	2617	.008	2309	.012	22	.000	27	.013	259	.009	0	.0	0	.0	4	.000	0	.0	0	.0	0	.0
608	4052	.012	3488	.019	99	.001	27	.013	435	.015	8	.006	0	.0	3	.000	0	.0	0	.0	0	.0
609	788	.002	620	.003	43	.000	1	.000	44	.002	0	.0	0	.0	1	.000	0	.0	0	.0	0	.0
790	385	.001	205	.001	134	.001	15	.007	32	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
791	754	.002	509	.003	158	.001	20	.010	67	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
792	723	.002	537	.003	131	.001	8	.004	41	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
793	1478	.005	1245	.007	85	.001	2	.001	134	.005	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
794	1920	.006	1471	.008	59	.001	9	.004	379	.013	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
795	1778	.005	1286	.007	331	.003	18	.009	144	.005	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
796	1440	.004	1046	.006	314	.003	16	.008	64	.002	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
797	3123	.010	1796	.010	843	.008	13	.006	469	.016	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
798	3200	.010	903	.005	2113	.020	3	.001	181	.006	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
799	2678	.008	635	.003	1994	.018	3	.001	46	.002	15	.011	0	.0	0	.0	0	.0	0	.0	0	.0
800	1342	.004	871	.005	247	.002	21	.010	203	.007	10	.007	0	.0	0	.0	0	.0	0	.0	0	.0
801	3287	.010	2362	.013	360	.003	44	.022	516	.018	12	.009	0	.0	0	.0	0	.0	0	.0	0	.0
802	486	.001	257	.001	136	.001	4	.002	83	.003	15	.011	0	.0	0	.0	0	.0	0	.0	0	.0
803	434	.001	173	.001	141	.001	1	.000	119	.004	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
804	323	.001	151	.001	132	.001	0	.0	39	.001	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
808	1239	.004	447	.002	711	.007	13	.006	67	.002	15	.011	0	.0	0	.0	0	.0	0	.0	0	.0
809	2336	.007	1314	.007	1010	.009	4	.002	7	.000	20	.014	2	.028	0	.0	0	.0	0	.0	0	.0
TOTAL	325271		186441		107794		2835		28730		1400		72		15585		0		0		0	

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	CRP ACRS #	CRP ACRS ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	FOR ACRS #	FOR ACRS ALLOC PROP
21	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.003	0	.0	0	.0	0	.0	0	.0
22	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	4	.002	0	.0	0	.0	0	.0	0	.0
23	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
32	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.019	0	.0	0	.0	0	.0	0	.0
33	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.003	0	.0	0	.0	0	.0	0	.0
34	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.019	0	.0	0	.0	0	.0	0	.0
35	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
36	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.002	0	.0	0	.0	0	.0	0	.0
48	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.014	0	.0	0	.0	0	.0	0	.0
49	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	65	.036	0	.0	0	.0	0	.0	0	.0
50	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.033	0	.0	0	.0	0	.0	0	.0
51	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.011	0	.0	0	.0	0	.0	0	.0
52	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.022	0	.0	0	.0	0	.0	0	.0
53	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.022	0	.0	0	.0	0	.0	0	.0
54	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.003	0	.0	0	.0	0	.0	16	.125
67	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.022	0	.0	0	.0	0	.0	0	.0
68	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.011	0	.0	0	.0	0	.0	0	.0
69	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	25	.014	0	.0	0	.0	0	.0	0	.0
70	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.011	0	.0	0	.0	0	.0	0	.0
71	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	75	.042	0	.0	0	.0	0	.0	0	.0
72	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	75	.042	0	.0	0	.0	0	.0	0	.0
73	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.033	0	.0	0	.0	0	.0	10	.078
74	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	30	.017	0	.0	0	.0	0	.0	10	.078
75	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	99	.055	0	.0	0	.0	0	.0	0	.0
88	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
89	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
90	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.011	0	.0	0	.0	0	.0	0	.0
91	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.044	0	.0	0	.0	0	.0	0	.0
92	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.047	0	.0	0	.0	0	.0	0	.0
93	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.047	0	.0	0	.0	0	.0	0	.0
94	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	85	.047	0	.0	0	.0	0	.0	0	.0
95	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	60	.033	0	.0	0	.0	0	.0	10	.078
96	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.028	0	.0	0	.0	0	.0	0	.0
97	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	64	.036	0	.0	0	.0	0	.0	0	.0
98	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0	0	.0	0	.0	0	.0
113	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
114	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.011	0	.0	0	.0	0	.0	0	.0
115	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.028	0	.0	0	.0	0	.0	0	.0
116	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	35	.019	0	.0	0	.0	0	.0	0	.0
117	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	80	.044	0	.0	0	.0	0	.0	0	.0
118	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	70	.039	0	.0	0	.0	0	.0	10	.078
119	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	50	.028	0	.0	0	.0	0	.0	10	.078
120	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	40	.022	0	.0	0	.0	0	.0	0	.0
121	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	20	.011	0	.0	0	.0	0	.0	5	.039
122	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.039
137	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
138	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	28	.016	0	.0	0	.0	0	.0	0	.0
162	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
501	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	4	.002	0	.0	0	.0	0	.0	0	.0
502	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP	ALLOC #	PROP
503	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
504	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
505	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
506	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
507	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0	0	.0	0	.0
508	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.006	0	.0	0	.0	5	.039
509	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.001	0	.0	0	.0	2	.016
510	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.001	0	.0	0	.0	2	.016
511	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
512	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	5	.039
513	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
514	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
518	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
519	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
520	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
521	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.023
522	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	3	.023
523	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.008
524	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	2	.016
525	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
526	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
527	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
528	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
529	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
530	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP
535	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
536	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .039
537	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .039
538	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	3 .023
539	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	1 .008
540	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	2 .016
541	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .039
542	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
543	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
544	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
545	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
546	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
552	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
554	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
555	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
556	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
557	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
561	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
562	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
563	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
571	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
572	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
573	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
574	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
575	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP
589	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
590	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
591	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
592	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
593	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
607	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
608	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
609	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
790	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	7 .004	0 .0	0 .0	0 .0	0 .0
791	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	2 .001	0 .0	0 .0	0 .0	0 .0
792	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .003	0 .0	0 .0	0 .0	0 .0
793	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	5 .003	0 .0	0 .0	0 .0	0 .0
794	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
795	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
796	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .006	0 .0	0 .0	0 .0	0 .0
797	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	10 .006	0 .0	0 .0	0 .0	0 .0
798	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	4 .002	0 .0	0 .0	0 .0	4 .031
799	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	4 .002	0 .0	0 .0	0 .0	4 .031
800	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
801	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
802	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
803	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
804	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
808	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	7 .004	0 .0	0 .0	0 .0	0 .0
809	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
TOTAL	0	0	0	0	0	0	0	1000	0	0	0	128

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
21	6000	452.0	4470.0
22	6000	457.0	4470.0
23	6000	462.0	4470.0
32	6000	447.0	4465.0
33	6000	452.0	4465.0
34	6000	457.0	4465.0
35	6000	462.0	4465.0
36	6000	467.0	4465.0
48	6000	442.0	4460.0
49	6000	447.0	4460.0
50	6000	452.0	4460.0
51	6000	457.0	4460.0
52	6000	462.0	4460.0
53	6000	467.0	4460.0
54	6000	472.0	4460.0
67	6000	442.0	4455.0
68	6000	447.0	4455.0
69	6000	452.0	4455.0
70	6000	457.0	4455.0
71	6000	462.0	4455.0
72	6000	467.0	4455.0
73	6000	472.0	4455.0
74	6000	477.0	4455.0
75	6000	482.0	4455.0
88	6000	437.0	4450.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
89	6000	442.0	4450.0
90	6000	447.0	4450.0
91	6000	452.0	4450.0
92	6000	457.0	4450.0
93	6000	462.0	4450.0
94	6000	467.0	4450.0
95	6000	472.0	4450.0
96	6000	477.0	4450.0
97	6000	482.0	4450.0
98	6000	487.0	4450.0
113	6000	447.0	4445.0
114	6000	452.0	4445.0
115	6000	457.0	4445.0
116	6000	462.0	4445.0
117	6000	467.0	4445.0
118	6000	472.0	4445.0
119	6000	477.0	4445.0
120	6000	482.0	4445.0
121	6000	487.0	4445.0
122	6000	492.0	4445.0
137	6000	452.0	4440.0
138	6000	457.0	4440.0
162	6000	457.0	4435.0
501	139 6000	464.5	4440.0
502	140 6000	467.0	4440.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
503	140 6000	469.5	4440.0
504	141 6000	472.0	4440.0
505	141 6000	474.5	4440.0
506	142 6000	477.0	4440.0
507	142 6000	479.5	4440.0
508	143 6000	482.0	4440.0
509	143 6000	484.5	4440.0
510	144 6000	487.0	4440.0
511	144 6000	489.5	4440.0
512	145 6000	492.0	4440.0
513	145 6000	494.5	4440.0
514	146 6000	497.0	4440.0
518	163 6000	464.5	4437.5
519	164 6000	467.0	4437.5
520	164 6000	469.5	4437.5
521	165 6000	472.0	4437.5
522	165 6000	474.5	4437.5
523	166 6000	477.0	4437.5
524	166 6000	479.5	4437.5
525	167 6000	482.0	4437.5
526	167 6000	484.5	4437.5
527	168 6000	487.0	4437.5
528	168 6000	489.5	4437.5
529	169 6000	492.0	4437.5
530	169 6000	494.5	4437.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
535	163 6000	464.5	4435.0
536	164 6000	467.0	4435.0
537	164 6000	469.5	4435.0
538	165 6000	472.0	4435.0
539	165 6000	474.5	4435.0
540	166 6000	477.0	4435.0
541	166 6000	479.5	4435.0
542	167 6000	482.0	4435.0
543	167 6000	484.5	4435.0
544	168 6000	487.0	4435.0
545	168 6000	489.5	4435.0
546	169 6000	492.0	4435.0
552	187 6000	464.5	4432.5
554	188 6000	469.5	4432.5
555	189 6000	472.0	4432.5
556	189 6000	474.5	4432.5
557	190 6000	477.0	4432.5
561	192 6000	487.0	4432.5
562	192 6000	489.5	4432.5
563	193 6000	492.0	4432.5
571	188 6000	469.5	4430.0
572	189 6000	472.0	4430.0
573	189 6000	474.5	4430.0
574	190 6000	477.0	4430.0
575	190 6000	479.5	4430.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
589	214 6000	472.0	4427.5
590	214 6000	474.5	4427.5
591	215 6000	477.0	4427.5
592	215 6000	479.5	4427.5
593	216 6000	482.0	4427.5
607	214 6000	474.5	4425.0
608	215 6000	477.0	4425.0
609	215 6000	479.5	4425.0
790	139 6000	462.0	4442.5
791	139 6000	464.5	4442.5
792	140 6000	467.0	4442.5
793	140 6000	469.5	4442.5
794	141 6000	472.0	4442.5
795	141 6000	474.5	4442.5
796	142 6000	477.0	4442.5
797	142 6000	479.5	4442.5
798	143 6000	482.0	4442.5
799	143 6000	484.5	4442.5
800	144 6000	487.0	4442.5
801	144 6000	489.5	4442.5
802	145 6000	492.0	4442.5
803	145 6000	494.5	4442.5
804	146 6000	497.0	4442.5
808	139 6000	462.0	4440.0
809	163 6000	462.0	4437.5

ALLOCATION PROGRAM FOR SUB-COUNTY AREAS

ENGINEERING-SCIENCE, INC.
MCLEAN, VA

PHILADELPHIA PM10 STUDY - PHILADELPHIA COUNTY PA

YEAR OF RECORD ON ALLOCATION FORM: 82
YEAR OF RECORD ON NEDS AREA FORM: 82

DESCRIPTION OF ALLOCATION CODES

ALLOC. CODE	ABBREVIATED DESCRIPTION	FULL DESCRIPTION OF CODE
A	AREA	AREA
B	POPULATN	POPULATION/100
C		
D		
E		
F		
G		
H	HOUSES	OCCUPIED HOUSEHOLDS
I	COMM VSL	COMMERCIAL VESSEL DATA
J	MIL AIR	MILITARY AIRCRAFT DATA
K	CIVL AIR	CIVIL AIRCRAFT DATA
L	COMM AIR	COMMERCIAL AIRCRAFT DATA
M		
N	COMM EMP	COMMERCIAL EMPLOYMENT
O	MFG EMP	MANUFACTURING EMPLOYMENT
P	AGRI EMP	AGRICULTURAL EMPLOYMENT
Q	CONS EMP	CONSTRUCTION EMPLOYMENT
R	RAILROAD	RAILROAD TRACK-MILES X 10
S	REC VSLS	RECREATIONAL VESSEL DATA
T	UNPV RDS	UNPAVED ROAD DATA
U	UNPV AIR	UNPAVED AIRSTRIP LOCATIONS
V		
W		
X		
Y		
Z		
1		
2		
3		
4		
5		
6	CRP ACRS	CROP ACREAGE
7		
8		
9		
0	FOR ACRS	FOREST ACREAGE

SELECTED BASIS OF ALLOCATION FOR EACH AREA SOURCE CATEGORY *

EM EST	RSDNTL FUEL	C/I FUEL	INDUST FUEL	O-S INC	OPN BRN	GSL	DSL	AIR	VESL	EV	VMT	MISC	OTHER
	HHHHHH	NNNNNN	0000006Q				O R	JKL	IIIS	QP	06QH	TU	06 HR

* SEQUENCE OF CATEGORIES WITHIN EACH DIVISION DEFINED ON NEDS AREA SOURCE CODING FORM.

*** WARNING: AN ALLOCATION BASIS HAS NOT BEEN SELECTED OR IS UNDEFINED FOR ONE OR MORE OF THE SOURCE CATEGORIES. NO ALLOCATION WILL BE PERFORMED FOR THESE CATEGORIES. ZERO WILL BE ASSUMED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN								HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
513	15444	.012	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	1	.004	2	.001
514	15444	.012	1147	.006	31	.003	2	.003	3	.004	34	.003	128	.004	358	.006	0	.0	0	.0
515	15444	.012	582	.003	42	.004	2	.003	3	.004	46	.004	64	.002	153	.002	0	.0	0	.0
516	15444	.012	33	.000	5	.000	0	.0	0	.0	5	.000	7	.000	0	.0	0	.0	0	.0
529	15444	.012	0	.0	0	.0	0	.0	0	.0	1	.000	1	.000	0	.0	0	.0	0	.0
530	15444	.012	1181	.007	43	.004	2	.003	2	.003	47	.004	87	.003	342	.005	0	.0	0	.0
531	15444	.012	1874	.010	78	.008	4	.007	4	.006	85	.008	195	.006	595	.010	0	.0	0	.0
532	15444	.012	942	.005	73	.007	4	.007	4	.006	82	.007	163	.005	203	.003	0	.0	0	.0
533	15444	.012	1310	.007	20	.002	1	.002	1	.001	22	.002	57	.002	321	.005	0	.0	0	.0
540	15444	.012	6	.000	0	.0	0	.0	0	.0	0	.0	7	.000	2	.000	0	.0	0	.0
541	15444	.012	272	.002	69	.007	4	.007	5	.007	76	.007	280	.009	70	.001	0	.0	0	.0
542	15444	.012	876	.005	59	.006	4	.007	4	.006	66	.006	298	.010	354	.006	0	.0	0	.0
543	15444	.012	2165	.012	93	.009	5	.008	7	.010	104	.009	302	.010	774	.012	0	.0	0	.0
544	15444	.012	283	.002	12	.001	0	.0	1	.001	13	.001	18	.001	101	.002	0	.0	0	.0
546	15444	.012	1199	.007	63	.006	4	.007	4	.006	70	.006	195	.006	443	.007	0	.0	0	.0
547	15444	.012	1354	.008	84	.008	4	.007	5	.007	92	.008	160	.005	454	.007	0	.0	0	.0
548	15444	012	1086	.006	124	.012	6	.010	7	.010	137	.012	170	.006	397	.006	0	.0	1	.004
549	15444	.012	1183	.007	34	.003	2	.003	2	.003	37	.003	89	.003	327	.005	0	.0	4	.025
550	15444	.012	1801	.010	35	.003	2	.003	2	.003	39	.004	67	.002	487	.008	0	.0	0	.0
557	15444	.012	129	.001	4	.000	1	.002	1	.001	4	.000	99	.003	44	.001	0	.0	0	.0
558	15444	.012	1063	.006	56	.006	4	.007	4	.006	61	.006	309	.010	379	.006	0	.0	0	.0
559	15444	.012	1513	.008	80	.008	6	.010	7	.010	88	.008	458	.015	572	.009	0	.0	0	.0
560	15444	.012	4422	.025	109	.011	9	.015	9	.013	122	.011	660	.022	1529	.024	0	.0	0	.0
561	15444	.012	4517	.025	181	.018	9	.015	10	.015	199	.018	543	.018	1598	.026	0	.0	0	.0
562	15444	.012	1134	.006	69	.007	2	.003	4	.006	75	.007	170	.006	411	.007	0	.0	0	.0

SUB-COUNTY NO.	AREA		POPULATN								HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
563	15444	.012	2885	.016	171	.017	9	.015	9	.013	189	.017	405	.013	1069	.017	0	.0	0	.0	0	.0	0	.0
564	15444	.012	3000	.017	157	.016	8	.014	8	.012	173	.016	366	.012	1131	.018	0	.0	0	.0	1	.004	2	.001
565	15444	.012	2455	.014	61	.006	3	.005	3	.004	67	.006	158	.005	791	.013	0	.0	0	.0	1	.004	2	.001
566	15444	.012	2051	.011	75	.007	4	.007	5	.007	84	.008	181	.006	603	.010	0	.0	0	.0	1	.004	1	.000
567	15444	.012	112	.001	15	.001	1	.002	1	.001	17	.002	18	.001	32	.001	0	.0	0	.0	1	.004	1	.000
574	15444	.012	67	.000	3	.000	0	.0	0	.0	4	.000	25	.001	25	.000	0	.0	0	.0	0	.0	0	.0
575	15444	.012	2504	.014	82	.008	5	.008	5	.007	90	.008	383	.013	842	.013	0	.0	0	.0	0	.0	0	.0
576	15444	.012	1532	.009	137	.014	7	.012	9	.013	152	.014	405	.013	659	.011	0	.0	0	.0	0	.0	0	.0
577	15444	.012	3622	.020	123	.012	8	.014	8	.012	136	.012	543	.018	1334	.021	0	.0	0	.0	0	.0	0	.0
578	15444	.012	5851	.033	269	.027	13	.022	15	.022	292	.026	788	.026	2213	.035	0	.0	0	.0	0	.0	0	.0
579	15444	.012	3716	.021	223	.022	11	.019	14	.021	245	.022	447	.015	1355	.022	0	.0	0	.0	0	.0	0	.0
580	15444	.012	4950	.028	246	.025	11	.019	14	.021	269	.024	625	.021	1782	.028	0	.0	0	.0	0	.0	0	.0
581	15444	.012	5127	.029	179	.018	10	.017	10	.015	196	.018	525	.017	1783	.028	0	.0	0	.0	1	.004	1	.000
582	15444	.012	2991	.017	116	.012	7	.012	8	.012	130	.012	342	.011	943	.015	4	.017	0	.0	0	.0	1	.000
583	15444	.012	382	.002	125	.012	7	.012	9	.013	141	.013	92	.003	76	.001	11	.046	0	.0	0	.0	1	.000
592	15444	.012	395	.002	77	.008	4	.007	4	.006	86	.008	50	.002	177	.003	0	.0	0	.0	0	.0	0	.0
593	15444	.012	1733	.010	367	.037	18	.031	22	.033	408	.037	256	.008	677	.011	0	.0	0	.0	0	.0	0	.0
594	15444	.012	2910	.016	235	.023	11	.019	14	.021	260	.023	355	.012	1023	.016	0	.0	0	.0	0	.0	0	.0
595	15444	.012	5680	.032	358	.036	16	.027	21	.031	392	.035	696	.023	2038	.033	0	.0	0	.0	0	.0	0	.0
596	15444	.012	2627	.015	144	.014	6	.010	7	.010	158	.014	383	.013	930	.015	0	.0	0	.0	0	.0	0	.0
597	15444	.012	2994	.017	194	.019	11	.019	12	.018	213	.019	554	.018	1112	.018	0	.0	0	.0	0	.0	0	.0
598	15444	.012	1507	.008	221	.022	14	.024	14	.021	245	.022	586	.019	532	.008	10	.042	0	.0	0	.0	0	.0
599	15444	.012	61	.000	47	.005	5	.008	5	.007	53	.005	199	.007	3	.000	20	.084	0	.0	0	.0	0	.0
608	15444	.012	1191	.007	128	.013	5	.008	8	.012	141	.013	273	.009	419	.007	0	.0	0	.0	0	.0	0	.0
609	15444	.012	2209	.012	225	.022	10	.017	13	.019	251	.023	376	.012	799	.013	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP
610	15444	.012	1068	.006	126	.013	7	.012	8	.012	141	.013	146	.005	343	.005	0	.0	0	.0	0	.0	0	.0
611	15444	.012	7970	.045	146	.015	10	.017	10	.015	162	.015	625	.021	2523	.040	0	.0	0	.0	0	.0	0	.0
612	15444	.012	7832	.044	234	.023	13	.022	14	.021	256	.023	902	.030	2376	.038	0	.0	0	.0	0	.0	0	.0
613	15444	.012	6355	.036	167	.017	10	.017	10	.015	184	.017	603	.020	2225	.036	0	.0	0	.0	0	.0	0	.0
614	15444	.012	842	.005	182	.018	10	.017	12	.018	202	.018	302	.010	294	.005	5	.021	0	.0	0	.0	0	.0
615	15444	.012	252	.001	11	.001	3	.005	3	.004	12	.001	185	.006	86	.001	5	.021	0	.0	0	.0	0	.0
624	15444	.012	107	.001	11	.001	0	.0	1	.001	12	.001	21	.001	39	.001	0	.0	0	.0	0	.0	0	.0
625	15444	.012	3340	.019	139	.014	6	.010	8	.012	151	.014	408	.013	1149	.018	0	.0	0	.0	0	.0	0	.0
626	15444	.012	6086	.034	213	.021	13	.022	14	.021	234	.021	824	.027	2180	.035	0	.0	0	.0	0	.0	0	.0
627	15444	.012	3894	.022	396	.040	20	.034	25	.037	438	.040	685	.023	1355	.022	17	.072	0	.0	0	.0	0	.0
628	15444	.012	4849	.027	308	.031	16	.027	21	.031	340	.031	905	.030	1883	.030	5	.021	0	.0	0	.0	0	.0
629	15444	.012	3343	.019	274	.027	18	.031	19	.028	301	.027	1026	.034	1137	.018	5	.021	0	.0	0	.0	0	.0
630	15444	.012	959	.005	139	.014	10	.017	12	.018	154	.014	454	.015	331	.005	10	.042	0	.0	0	.0	0	.0
631	15444	.012	10	.000	11	.001	1	.002	2	.003	12	.001	78	.003	3	.000	7	.030	0	.0	0	.0	0	.0
642	15444	.012	1307	.007	29	.003	1	.002	1	.001	30	.003	96	.003	409	.007	0	.0	0	.0	0	.0	0	.0
643	15444	.012	7552	.042	170	.017	11	.019	12	.018	184	.017	767	.025	2587	.041	0	.0	0	.0	0	.0	0	.0
644	15444	.012	3366	.019	293	.029	13	.022	18	.027	322	.029	639	.021	1228	.020	18	.076	0	.0	0	.0	0	.0
645	15444	.012	5785	.032	395	.039	43	.073	44	.065	444	.040	2808	.093	2904	.046	5	.021	0	.0	0	.0	0	.0
646	15444	.012	2150	.012	273	.027	27	.046	30	.044	302	.027	1803	.059	959	.015	10	.042	0	.0	0	.0	0	.0
659	15444	.012	771	.004	30	.003	2	.003	2	.003	33	.003	117	.004	253	.004	0	.0	4	.025	7	.026	4	.001
660	15444	.012	3200	.018	112	.011	8	.014	8	.012	122	.011	536	.018	1056	.017	0	.0	11	.068	16	.060	14	.005
661	15444	.012	1924	.011	158	.016	8	.014	11	.016	176	.016	277	.009	612	.010	12	.051	10	.062	15	.057	41	.015
662	15444	.012	7765	.043	166	.017	10	.017	12	.018	182	.016	639	.021	2688	.043	0	.0	9	.056	13	.049	46	.017
663	15444	.012	3424	.019	93	.009	10	.017	10	.015	104	.009	589	.019	1155	.018	12	.051	0	.0	0	.0	0	.0
676	15444	.012	505	.003	35	.003	3	.005	3	.004	39	.004	185	.006	168	.003	0	.0	9	.056	13	.049	1	.000

SUB-COUNTY NO.	AREA		POPULATN										HOUSES		COMM VSL		MIL AIR		CIVL AIR		COMM AIR	
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
677	15444	.012	307	.002	78	.008	6	.010	6	.009	86	.008	231	.008	104	.002	11	.046	12	.075	18	.068	14	.005
678	15444	.012	463	.003	71	.007	4	.007	4	.006	79	.007	114	.004	150	.002	22	.093	12	.075	18	.068	46	.017
679	15444	.012	428	.002	116	.012	6	.010	7	.010	131	.012	181	.006	120	.002	10	.042	11	.068	16	.060	46	.017
680	15444	.012	84	.000	106	.011	7	.012	8	.012	120	.011	209	.007	21	.000	13	.055	0	.0	0	.0	0	.0
693	15444	.012	47	.000	61	.006	3	.005	4	.006	67	.006	96	.003	17	.000	0	.0	13	.081	19	.072	780	.286
694	15444	.012	2	.000	33	.003	2	.003	2	.003	37	.003	35	.001	0	.0	0	.0	26	.161	39	.147	1561	.572
695	15444	.012	23	.000	100	.010	6	.010	7	.010	111	.010	174	.006	1	.000	13	.055	26	.161	39	.147	81	.030
696	15444	.012	31	.000	1	.000	1	.002	1	.001	1	.000	57	.002	2	.000	12	.051	13	.081	19	.072	41	.015
697	15444	.012	23	.000	0	.0	0	.0	0	.0	0	.0	32	.001	1	.000	0	.0	0	.0	0	.0	0	.0
804	15444	.012	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	1312740		178688		10019		589		676		11066		30307		62591		237		161		265		2730	

***EXECUTION TERMINATING NORMALLY. 85 SUB-COUNTY AREAS PROCESSED.

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
513	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.002	0	.0	0	.0	0	.0
514	1936	.002	100	.002	801	.004	6	.010	10	.003	17	.016	0	.0	75	.013	0	.0	0	.0	0	.0
515	2332	.003	119	.002	1042	.005	3	.005	9	.002	18	.017	0	.0	65	.012	0	.0	0	.0	0	.0
516	446	.000	31	.000	131	.001	0	.0	0	.0	0	.0	0	.0	20	.004	0	.0	0	.0	0	.0
529	2	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	10	.002	0	.0	0	.0	0	.0
530	2172	.002	115	.002	373	.002	8	.014	63	.016	0	.0	0	.0	75	.013	0	.0	0	.0	0	.0
531	6568	.007	281	.004	2877	.014	26	.045	82	.021	14	.014	0	.0	100	.018	0	.0	0	.0	0	.0
532	7801	.009	445	.007	2748	.013	0	.0	59	.015	0	.0	0	.0	100	.018	0	.0	0	.0	0	.0
533	1397	.002	107	.002	224	.001	3	.005	9	.002	0	.0	0	.0	75	.013	0	.0	0	.0	0	.0
540	24	.000	2	.000	0	.0	0	.0	0	.0	0	.0	0	.0	10	.002	0	.0	0	.0	0	.0
541	964	.001	91	.001	8	.000	3	.005	2	.001	0	.0	0	.0	75	.013	0	.0	0	.0	0	.0
542	3393	.004	301	.005	107	.001	34	.059	20	.005	0	.0	0	.0	50	.009	0	.0	0	.0	0	.0
543	2938	.003	272	.004	20	.000	5	.009	14	.004	0	.0	0	.0	50	.009	0	.0	0	.0	0	.0
544	415	.000	38	.001	5	.000	0	.0	2	.001	0	.0	0	.0	10	.002	0	.0	0	.0	0	.0
546	1693	.002	115	.002	247	.001	1	.002	26	.007	25	.024	0	.0	60	.011	0	.0	0	.0	0	.0
547	2054	.002	146	.002	102	.000	7	.012	47	.012	0	.0	0	.0	100	.018	0	.0	0	.0	0	.0
548	7440	.008	434	.007	2806	.013	39	.068	23	.006	6	.006	0	.0	100	.018	0	.0	0	.0	0	.0
549	5287	.006	401	.006	1160	.005	5	.009	10	.003	0	.0	0	.0	100	.018	0	.0	0	.0	0	.0
550	1484	.002	121	.002	108	.001	12	.021	14	.004	0	.0	0	.0	50	.009	0	.0	0	.0	0	.0
557	552	.001	34	.001	190	.001	2	.003	1	.000	18	.017	1	.019	60	.011	0	.0	0	.0	0	.0
558	1151	.001	88	.001	157	.001	7	.012	7	.002	0	.0	0	.0	100	.018	0	.0	0	.0	0	.0
559	2783	.003	241	.004	87	.000	11	.019	23	.006	22	.021	2	.038	100	.018	0	.0	0	.0	0	.0
560	5059	.006	376	.006	557	.003	57	.099	59	.015	13	.013	0	.0	100	.018	0	.0	0	.0	0	.0
561	5651	.006	469	.007	306	.001	9	.016	57	.015	0	.0	0	.0	65	.012	0	.0	0	.0	0	.0
562	1183	.001	100	.002	43	.000	3	.005	12	.003	10	.010	0	.0	10	.002	0	.0	0	.0	0	.0

SUB-COUNTY NO.		COMM EMP	MFG EMP	AGRI EMP	CONS EMP	RAILROAD	REC VSLS	UNPV RDS	UNPV AIR			
	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP	# ALLOC PROP
563	5498 .006	430 .007	602 .003	7 .012	53 .014	8 .008	0 .0	70 .012	0 .0	0 .0	0 .0	0 .0
564	7342 .008	633 .010	450 .002	2 .003	52 .013	0 .0	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
565	3184 .003	193 .003	830 .004	2 .003	41 .011	10 .010	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
566	2701 .003	184 .003	294 .001	4 .007	54 .014	5 .005	0 .0	95 .017	0 .0	0 .0	0 .0	0 .0
567	161 .000	10 .000	52 .000	1 .002	1 .000	0 .0	0 .0	10 .002	0 .0	0 .0	0 .0	0 .0
574	346 .000	20 .000	119 .001	0 .0	2 .001	18 .017	1 .019	20 .004	0 .0	0 .0	0 .0	0 .0
575	5657 .006	342 .005	1649 .008	4 .007	54 .014	34 .033	2 .038	75 .013	0 .0	0 .0	0 .0	0 .0
576	2877 .003	214 .003	583 .003	4 .007	11 .003	8 .008	2 .038	100 .018	0 .0	0 .0	0 .0	0 .0
577	14533 .016	1058 .016	3033 .014	18 .031	82 .021	17 .016	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
578	20541 .022	1496 .023	4193 .020	15 .026	128 .033	25 .024	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
579	11766 .013	736 .011	3274 .016	5 .009	109 .028	25 .024	0 .0	95 .017	0 .0	0 .0	0 .0	0 .0
580	16357 .018	1518 .023	632 .003	8 .014	43 .011	7 .007	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
581	6679 .007	590 .009	226 .001	28 .049	47 .012	0 .0	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
582	7155 .008	462 .007	1747 .008	8 .014	73 .019	15 .014	1 .019	95 .017	0 .0	0 .0	0 .0	0 .0
583	2711 .003	205 .003	368 .002	3 .005	27 .007	5 .005	3 .058	60 .011	0 .0	0 .0	0 .0	0 .0
592	1921 .002	170 .003	157 .001	0 .0	6 .002	0 .0	0 .0	20 .004	0 .0	0 .0	0 .0	0 .0
593	6918 .008	498 .008	1735 .008	1 .002	17 .004	45 .043	2 .038	95 .017	0 .0	0 .0	0 .0	0 .0
594	17972 .020	700 .011	10661 .051	0 .0	25 .006	45 .043	0 .0	10 .002	0 .0	0 .0	0 .0	0 .0
595	23148 .025	1423 .022	6821 .032	6 .010	199 .051	29 .028	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
596	19258 .021	714 .011	11576 .055	2 .003	50 .013	14 .014	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
597	16056 .018	904 .014	6037 .029	25 .043	88 .023	14 .014	0 .0	100 .018	0 .0	0 .0	0 .0	0 .0
598	9723 .011	664 .010	2892 .014	27 .047	12 .003	28 .027	2 .038	75 .013	0 .0	0 .0	0 .0	0 .0
599	1505 .002	60 .001	827 .004	0 .0	7 .002	0 .0	2 .038	10 .002	0 .0	0 .0	0 .0	0 .0
608	2226 .002	196 .003	132 .001	3 .005	10 .003	0 .0	0 .0	35 .006	0 .0	0 .0	0 .0	0 .0
609	5582 .006	489 .007	365 .002	4 .007	26 .007	0 .0	0 .0	80 .014	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY NO.		ALLOC PROP	COMM EMP $	ALLOC PROP	MFG EMP $	ALLOC PROP	AGRI EMP $	ALLOC PROP	CONS EMP $	ALLOC PROP	RAILROAD $	ALLOC PROP	REC VSLS $	ALLOC PROP	UNPV RDS $	ALLOC PROP	UNPV AIR $	ALLOC PROP	$	ALLOC PROP	$	ALLOC PROP
610	2822	.003	202	.003	665	.003	0	.0	13	.003	27	.026	2	.038	100	.018	0	.0	0	.0	0	.0
611	15872	.017	1008	.015	4712	.022	1	.002	100	.026	18	.017	0	.0	100	.018	0	.0	0	.0	0	.0
612	33984	.037	1791	.027	15025	.071	2	.003	93	.024	30	.029	0	.0	100	.018	0	.0	0	.0	0	.0
613	24873	.027	1258	.019	11552	.055	7	.012	65	.017	7	.007	0	.0	100	.018	0	.0	0	.0	0	.0
614	7585	.008	330	.005	4061	.019	1	.002	18	.005	28	.027	2	.038	90	.016	0	.0	0	.0	0	.0
615	1682	.002	45	.001	1185	.005	1	.002	4	.001	10	.010	2	.038	10	.002	0	.0	0	.0	0	.0
624	259	.000	23	.000	3	.000	0	.0	3	.001	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0
625	6599	.007	556	.008	275	.001	22	.038	69	.018	26	.025	0	.0	65	.012	0	.0	0	.0	0	.0
626	15696	.017	1083	.016	3902	.019	13	.023	84	.022	8	.008	0	.0	100	.018	0	.0	0	.0	0	.0
627	14724	.016	1104	.017	3022	.014	5	.009	56	.014	30	.029	2	.038	100	.018	0	.0	0	.0	0	.0
628	56054	.061	3716	.056	15831	.075	17	.030	285	.073	20	.019	0	.0	100	.018	0	.0	0	.0	0	.0
629	37831	.041	1919	.029	17519	.083	3	.005	101	.026	12	.012	2	.038	80	.014	0	.0	0	.0	0	.0
630	4636	.005	269	.004	1839	.009	0	.0	7	.002	6	.006	2	.038	20	.004	0	.0	0	.0	0	.0
631	344	.000	15	.000	160	.001	0	.0	1	.000	0	.0	0	.0	5	.001	0	.0	0	.0	0	.0
642	1425	.002	118	.002	140	.001	3	.005	9	.002	0	.0	0	.0	20	.004	0	.0	0	.0	0	.0
643	11992	.013	933	.014	1722	.008	1	.002	85	.022	26	.025	0	.0	95	.017	0	.0	0	.0	0	.0
644	31440	.034	2498	.038	5663	.027	14	.024	71	.018	30	.029	2	.038	100	.018	0	.0	0	.0	0	.0
645	193027	.211	16183	.246	24884	.118	49	.085	583	.150	20	.019	0	.0	100	.018	0	.0	0	.0	0	.0
646	105372	.115	8891	.135	14766	.070	8	.014	149	.038	12	.012	2	.038	60	.011	0	.0	0	.0	0	.0
659	1377	.002	96	.001	148	.001	0	.0	25	.006	6	.006	0	.0	20	.004	0	.0	0	.0	0	.0
660	9536	.010	515	.008	3048	.014	0	.0	126	.032	28	.027	2	.038	100	.018	0	.0	0	.0	0	.0
661	5930	.006	479	.007	1035	.005	4	.007	8	.002	27	.026	2	.038	100	.018	0	.0	0	.0	0	.0
662	15248	.017	1222	.019	1933	.009	6	.010	101	.026	0	.0	0	.0	100	.018	0	.0	0	.0	0	.0
663	8137	.009	544	.008	2409	.011	0	.0	24	.006	30	.029	2	.038	50	.009	0	.0	0	.0	0	.0
676	505	.001	37	.001	32	.000	0	.0	8	.002	8	.008	0	.0	60	.011	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.			COMM EMP		MFG EMP		AGRI EMP		CONS EMP		RAILROAD		REC VSLS		UNPV RDS		UNPV AIR					
	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP	#	ALLOC PROP
677	2423	.003	210	.003	209	.001	0	.0	10	.003	18	.017	2	.038	100	.018	0	.0	0	.0	0	.0
678	4888	.005	450	.007	363	.002	1	.002	2	.001	28	.027	2	.038	100	.018	0	.0	0	.0	0	.0
679	6299	.007	589	.009	232	.001	0	.0	16	.004	35	.034	2	.038	100	.018	0	.0	0	.0	0	.0
680	6520	.007	588	.009	623	.003	0	.0	0	.0	30	.029	2	.038	25	.004	0	.0	0	.0	0	.0
693	523	.001	40	.001	82	.000	0	.0	2	.001	10	.010	0	.0	40	.007	0	.0	0	.0	0	.0
694	1215	.001	84	.001	328	.002	0	.0	4	.001	10	.010	0	.0	60	.011	0	.0	0	.0	0	.0
695	3065	.003	278	.004	249	.001	0	.0	3	.001	0	.0	2	.038	10	.002	0	.0	0	.0	0	.0
696	2909	.003	298	.004	3	.000	0	.0	0	.0	0	.0	2	.038	0	.0	0	.0	0	.0	0	.0
697	2188	.002	217	.003	3	.000	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
804	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	913434		65917		210917		576		3891		1035		52		5630		0		0		0	

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS
	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP	ALLOC $ PROP
513	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
514	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
515	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
516	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
529	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
530	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
531	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
532	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
533	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
540	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
541	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
542	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
543	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
544	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
546	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
547	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
548	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
549	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
550	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
557	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
558	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
559	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
560	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
561	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
562	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.								CRP ACRS				FOR ACRS	
	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP
563	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
564	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
565	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
566	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
567	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
574	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
575	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
576	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
577	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
578	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
579	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
580	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
581	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
582	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
583	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
592	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
593	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
594	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
595	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
596	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
597	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
598	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
599	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
608	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
609	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	CRP ACRS ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	FOR ACRS ALLOC $	PROP
610	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
611	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
612	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
613	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
614	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
615	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
624	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
625	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
626	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
627	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
628	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
629	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
630	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
631	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
642	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
643	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
644	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
645	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
646	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
659	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
660	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
661	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
662	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
663	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
676	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0

SUB-COUNTY ALLOCATIONS

SUB-COUNTY NO.	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	CRP ACRS ALLOC $	PROP	ALLOC $	PROP	ALLOC $	PROP	FOR ACRS ALLOC $	PROP
677	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
678	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
679	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
680	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
693	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
694	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
695	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
696	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
697	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
804	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0	0	.0
TOTAL	0		0		0		0		0		0		0		0		0		0	

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
513	145 7160	494.5	4440.0
514	146 7160	497.0	4440.0
515	146 7160	499.5	4440.0
516	147 7160	502.0	4440.0
529	169 7160	492.0	4437.5
530	169 7160	494.5	4437.5
531	170 7160	497.0	4437.5
532	170 7160	499.5	4437.5
533	171 7160	502.0	4437.5
540	166 7160	477.0	4435.0
541	166 7160	479.5	4435.0
542	167 7160	482.0	4435.0
543	167 7160	484.5	4435.0
544	168 7160	487.0	4435.0
546	169 7160	492.0	4435.0
547	169 7160	494.5	4435.0
548	170 7160	497.0	4435.0
549	170 7160	499.5	4435.0
550	171 7160	502.0	4435.0
557	190 7160	477.0	4432.5
558	190 7160	479.5	4432.5
559	191 7160	482.0	4432.5
560	191 7160	484.5	4432.5
561	192 7160	487.0	4432.5
562	192 7160	489.5	4432.5

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
563	193 7160	492.0	4432.5
564	193 7160	494.5	4432.5
565	194 7160	497.0	4432.5
566	194 7160	499.5	4432.5
567	195 7160	502.0	4432.5
574	190 7160	477.0	4430.0
575	190 7160	479.5	4430.0
576	191 7160	482.0	4430.0
577	191 7160	484.5	4430.0
578	192 7160	487.0	4430.0
579	192 7160	489.5	4430.0
580	193 7160	492.0	4430.0
581	193 7160	494.5	4430.0
582	194 7160	497.0	4430.0
583	194 7160	499.5	4430.0
592	215 7160	479.5	4427.5
593	216 7160	482.0	4427.5
594	216 7160	484.5	4427.5
595	217 7160	487.0	4427.5
596	217 7160	489.5	4427.5
597	218 7160	492.0	4427.5
598	218 7160	494.5	4427.5
599	219 7160	497.0	4427.5
608	215 7160	477.0	4425.0
609	215 7160	479.5	4425.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
610	216 7160	482.0	4425.0
611	216 7160	484.5	4425.0
612	217 7160	487.0	4425.0
613	217 7160	489.5	4425.0
614	218 7160	492.0	4425.0
615	218 7160	494.5	4425.0
624	239 7160	474.5	4422.5
625	240 7160	477.0	4422.5
626	240 7160	479.5	4422.5
627	241 7160	482.0	4422.5
628	241 7160	484.5	4422.5
629	242 7160	487.0	4422.5
630	242 7160	489.5	4422.5
631	243 7160	492.0	4422.5
642	240 7160	477.0	4420.0
643	240 7160	479.5	4420.0
644	241 7160	482.0	4420.0
645	241 7160	484.5	4420.0
646	242 7160	487.0	4422.0
659	266 7160	477.0	4417.5
660	266 7160	479.5	4417.5
661	267 7160	482.0	4417.5
662	267 7160	484.5	4417.5
663	268 7160	487.0	4417.5
676	266 7160	477.0	4415.0

DEFINITION OF SUB-COUNTY NUMBERS

SUB-COUNTY NO.	NAME	UTM LOCATION (KM) E	N
677	266 7160	479.5	4415.0
678	267 7160	482.0	4415.0
679	267 7160	484.5	4415.0
680	268 7160	487.0	4415.0
693	293 7160	477.0	4412.5
694	293 7160	479.5	4412.5
695	294 7160	482.0	4412.5
696	294 7160	484.5	4412.5
697	295 7160	487.0	4412.5
804	146 7160	497.0	4442.5

APPENDIX F

PARTICLE SIZE, SULFATE, AND SO_2 FILES

Point Source - pages 468 - 475
IPFPE - page 476
Area Source - page 477

LIST OF COMPONENT FACTORS

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	10100201		0.00000	3.00000	97.00000	9.88000	19.45000
P	10100202		0.00000	3.00000	97.00000	9.88000	19.45000
P	10100202	FILTER	0.00000	1.96000	97.00000	30.00000	34.00000
P	10100202	ESP	0.00000	1.96000	97.00000	37.00000	39.00000
P	10100202	SCRUBBER	0.00000	1.96000	97.00000	74.00000	12.00000
P	10100401		0.00000	5.00000	95.00000	46.50000	12.60000
P	10100401	FILTER	0.00000	2.40000	95.00000	54.60000	17.30000
P	10100401	ESP	0.00000	2.40000	95.00000	54.60000	17.30000
P	10100401	SCRUBBER	0.00000	2.40000	95.00000	74.90000	13.20000
P	10100404		0.00000	5.00000	95.00000	46.50000	12.60000
P	10100404	FILTER	0.00000	2.40000	95.00000	46.50000	12.60000
P	10100404	ESP	0.00000	2.40000	95.00000	54.60000	17.30000
P	10100404	SCRUBBER	0.00000	2.40000	95.00000	74.90000	13.20000
P	10100501		0.00000	5.00000	95.00000	70.70000	9.40000
P	10100501	FILTER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10100501	ESP	0.00000	2.40000	95.00000	70.70000	9.40000
P	10100503		0.00000	5.00000	95.00000	70.70000	9.40000
P	10100503	FILTER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10100503	ESP	0.00000	2.40000	95.00000	70.70000	9.40000
P	10100801		0.00000	1.00000	99.00000	30.70000	15.90000
P	10200201		0.00000	3.00000	97.00000	9.88000	19.45000
P	10200201	FILTER	0.00000	1.96000	97.00000	30.00000	34.00000
P	10200201	ESP	0.00000	1.96000	97.00000	37.00000	39.00000
P	10200201	SCRUBBER	0.00000	1.96000	97.00000	74.00000	12.00000
P	10200202		0.00000	3.00000	97.00000	9.88000	19.45000
P	10200202	FILTER	0.00000	1.96000	97.00000	30.00000	34.00000
P	10200202	ESP	0.00000	1.96000	97.00000	37.00000	39.00000
P	10200202	SCRUBBER	0.00000	1.96000	97.00000	74.00000	12.00000
P	10200401		0.00000	5.00000	95.00000	33.20000	22.30000
P	10200401	FILTER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200401	ESP	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200401	SCRUBBER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200402		0.00000	5.00000	95.00000	33.20000	22.30000
P	10200402	FILTER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200402	ESP	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200402	SCRUBBER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200403		0.00000	5.00000	95.00000	33.20000	22.30000
P	10200403	FILTER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200403	ESP	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200403	SCRUBBER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200404		0.00000	5.00000	95.00000	33.20000	22.30000
P	10200404	FILTER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200404	ESP	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200404	SCRUBBER	0.00000	2.40000	95.00000	33.20000	22.30000
P	10200501		0.00000	5.00000	95.00000	70.70000	9.40000
P	10200501	FILTER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200501	ESP	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200501	SCRUBBER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200502		0.00000	5.00000	95.00000	70.70000	9.40000
P	10200502	FILTER	0.00000	2.40000	95.00000	70.70000	9.40000

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	10200502	ESP	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200502	SCRUBBER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200503		0.00000	5.00000	95.00000	70.70000	9.40000
P	10200503	FILTER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200503	ESP	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200503	SCRUBBER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200504		0.00000	5.00000	95.00000	70.70000	9.40000
P	10200504	FILTER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200504	ESP	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200504	SCRUBBER	0.00000	2.40000	95.00000	70.70000	9.40000
P	10200601		0.00000	1.00000	99.00000	94.00000	4.00000
P	10200603		0.00000	1.00000	99.00000	94.00000	4.00000
P	10200701		0.00000	1.00000	99.00000	94.00000	4.00000
P	10200708		0.00000	1.00000	99.00000	94.00000	4.00000
P	10200799		0.00000	1.00000	99.00000	94.00000	4.00000
P	10201003		0.00000	1.00000	99.00000	94.00000	4.00000
P	10201302		0.00000	2.00000	98.00000	33.20000	22.30000
P	10299997		0.00000	2.00000	98.00000	94.00000	4.00000
P	10300102		0.00000	1.00000	99.00000	13.00000	28.00000
P	10300107		0.00000	1.00000	99.00000	13.00000	28.00000
P	10300110		0.00000	1.00000	99.00000	13.00000	28.00000
P	10300401		0.00000	5.00000	95.00000	70.00000	21.00000
P	10300402		0.00000	5.00000	95.00000	70.00000	21.00000
P	10300403		0.00000	5.00000	95.00000	70.00000	21.00000
P	10300501		0.00000	5.00000	95.00000	70.90000	9.40000
P	10300502		0.00000	5.00000	95.00000	70.90000	9.40000
P	10300503		0.00000	5.00000	95.00000	70.90000	9.40000
P	10300603		0.00000	1.00000	99.00000	94.00000	4.00000
P	10500104		0.00000	5.00000	95.00000	70.70000	9.40000
P	10500105		0.00000	5.00000	95.00000	70.70000	9.40000
P	10500106		0.00000	2.00000	98.00000	94.00000	4.00000
P	10500205		0.00000	5.00000	95.00000	70.70000	9.40000
P	19999999		0.00000	5.00000	95.00000	70.70000	9.40000
P	20100101		0.00000	5.00000	95.00000	70.70000	9.40000
P	20200202		0.00000	1.00000	99.00000	94.00000	4.00000
P	20400499		0.00000	1.00000	99.00000	94.00000	4.00000
P	30100199		0.00000	0.00000	0.00000	82.00000	15.00000
P	30100504		0.00000	1.00000	99.00000	70.00000	21.00000
P	30100504	FILTER	0.00000	1.00000	99.00000	87.20000	10.50000
P	30100599	FILTER	0.00000	1.00000	99.00000	87.20000	10.50000
P	30100901	SCRUBBER	0.00000	1.00000	99.00000	99.03000	0.83000
P	30100903	SCRUBBER	0.00000	1.00000	99.00000	99.03000	0.83000
P	30101199		0.00000	1.00000	99.00000	82.00000	15.00000
P	30101306		0.00000	20.00000	80.00000	82.00000	15.00000
P	30101401		0.00000	1.00000	99.00000	23.00000	16.00000
P	30101801		0.00000	1.00000	99.00000	82.00000	15.00000
P	30101802		0.00000	1.00000	99.00000	82.00000	15.00000
P	30101899		0.00000	1.00000	99.00000	82.00000	15.00000
P	30101903		0.00000	80.00000	20.00000	82.00000	15.00000
P	30102005		0.00000	1.00000	99.00000	82.00000	15.00000

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	30102201		0.00000	3.80000	96.20000	58.60000	41.30000
P	30102308		0.00000	3.80000	96.20000	58.60000	41.30000
P	30102310		0.00000	3.80000	96.20000	58.60000	41.30000
P	30102399		0.00000	3.80000	96.20000	58.60000	41.30000
P	30102499		0.00000	1.00000	99.00000	82.00000	15.00000
P	30102620		0.00000	1.00000	99.00000	82.00000	15.00000
P	30103204		0.00000	0.00000	99.99999	0.00000	0.00000
P	30103299		0.00000	0.00000	99.99999	0.00000	0.00000
P	30103402		0.00000	0.00000	0.00000	82.00000	15.00000
P	30103501		0.00000	1.00000	99.00000	5.20000	49.40000
P	30103599		0.00000	1.00000	99.00000	82.00000	15.00000
P	30106099		0.00000	0.00000	0.00000	82.00000	15.00000
P	30113299		0.00000	1.00000	99.00000	0.00000	0.00000
P	30199999		0.00000	2.00000	98.00000	6.90000	92.90000
P	30200202		0.00000	2.00000	98.00000	1.90000	2.50000
P	30200204		0.00000	0.00000	0.00000	1.90000	2.50000
P	30200501		0.00000	0.00000	0.00000	0.00000	0.90000
P	30200502		0.00000	0.00000	0.00000	0.00000	0.90000
P	30200504		0.00000	0.00000	0.00000	9.00000	18.00000
P	30200901		0.00000	0.00000	0.00000	0.00000	0.90000
P	30201301		0.00000	0.00000	0.00000	13.00000	28.00000
P	30201501		0.00000	1.00000	99.00000	51.00000	25.00000
P	30201899		0.00000	0.00000	0.00000	28.00000	14.00000
P	30299998		0.00000	0.00000	0.00000	58.60000	41.30000
P	30299999		0.00000	0.00000	0.00000	0.00000	14.00000
P	30300199	FILTER	0.00000	0.00000	0.00000	56.00000	21.00000
P	30300302		0.00000	2.00000	98.00000	75.00000	21.00000
P	30300302	SCRUBBER	0.00000	2.00000	98.00000	60.00000	27.00000
P	30300303		0.00000	2.00000	98.00000	60.00000	27.00000
P	30300303	SCRUBBER	0.00000	2.00000	98.00000	60.00000	27.00000
P	30300304		0.00000	2.00000	98.00000	80.00000	12.00000
P	30300305		0.00000	0.00000	0.00000	0.00000	14.00000
P	30300306		0.00000	2.00000	98.00000	75.00000	17.70000
P	30300307		0.00000	2.00000	98.00000	0.00000	14.00000
P	30300308		0.00000	2.00000	98.00000	98.30000	1.70000
P	30300314		0.00000	0.00000	0.00000	98.30000	1.70000
P	30300399		0.00000	0.00000	0.00000	75.00000	17.70000
P	30300804		0.00000	0.00000	0.00000	16.00000	34.00000
P	30300811		0.00000	0.00000	0.00000	2.00000	11.00000
P	30300813		0.00000	2.00000	98.00000	6.60000	5.40000
P	30300813	FILTER	0.00000	2.00000	98.00000	25.90000	34.10000
P	30300813	ESP	0.00000	2.00000	98.00000	54.00000	28.00000
P	30300813	SCRUBBER	0.00000	2.00000	98.00000	95.10000	3.90000
P	30300815		0.00000	0.00000	0.00000	16.00000	34.00000
P	30300824		0.00000	2.00000	98.00000	15.00000	7.00000
P	30300901		0.00000	5.00000	95.00000	64.00000	20.50000
P	30300901	ESP	0.00000	5.00000	95.00000	49.30000	17.50000
P	30300904		0.00000	2.00000	98.00000	53.00000	20.00000
P	30300904	FILTER	0.00000	2.00000	98.00000	39.20000	39.90000
P	30300910		0.00000	2.00000	98.00000	80.00000	12.00000

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	30300911		0.00000	2.00000	98.00000	88.00000	12.00000
P	30300912		0.00000	0.00000	0.00000	88.00000	12.00000
P	30300933		0.00000	2.00000	98.00000	88.00000	12.00000
P	30300934		0.00000	2.00000	98.00000	67.90000	12.20000
P	30300999		0.00000	2.00000	98.00000	88.00000	12.00000
P	30301299		0.00000	0.00000	0.00000	44.00000	43.00000
P	30399999		0.00000	0.00000	0.00000	44.00000	43.00000
P	30400101		0.00000	0.00000	0.00000	56.00000	21.00000
P	30400102		0.00000	5.00000	95.00000	56.00000	21.00000
P	30400103		0.00000	5.00000	95.00000	56.00000	21.00000
P	30400199		0.00000	5.00000	95.00000	56.00000	21.00000
P	30400201		0.00000	5.00000	95.00000	95.10000	3.30000
P	30400202		0.00000	5.00000	95.00000	95.10000	3.30000
P	30400203		0.00000	5.00000	95.00000	95.10000	3.30000
P	30400204		0.00000	0.00000	0.00000	95.10000	3.30000
P	30400299		0.00000	0.00000	0.00000	1.20000	3.80000
P	30400302		0.00000	5.00000	95.00000	76.00000	4.70000
P	30400330		0.00000	0.00000	0.00000	11.50000	11.40000
P	30400340		0.00000	0.00000	0.00000	80.00000	12.00000
P	30400401		0.00000	0.00000	0.00000	80.00000	12.00000
P	30400402		0.00000	1.00000	99.00000	80.00000	12.00000
P	30400404		0.00000	10.00000	90.00000	80.00000	12.00000
P	30400404	SCRUBBER	0.00000	10.00000	90.00000	56.80000	14.50000
P	30400499		0.00000	1.00000	99.00000	7.10000	16.70000
P	30400705		0.00000	0.00000	0.00000	39.80000	8.90000
P	30400706		0.00000	0.00000	0.00000	44.00000	35.00000
P	30400715		0.00000	0.00000	0.00000	58.30000	10.80000
P	30400799		0.00000	0.00000	0.00000	58.30000	10.80000
P	30400805		0.00000	4.00000	96.00000	80.00000	12.00000
P	30405001		0.00000	0.00000	0.00000	1.20000	3.80000
P	30405001	SCRUBBER	0.00000	0.00000	0.00000	57.20000	18.60000
P	30499999		0.00000	5.00000	95.00000	80.00000	12.00000
P	30500101		0.00000	6.00000	94.00000	70.00000	10.00000
P	30500102		0.00000	0.00000	0.00000	59.00000	19.00000
P	30500104	FILTER	0.00000	0.00000	0.00000	6.10000	34.60000
P	30500199		0.00000	5.00000	95.00000	6.10000	34.60000
P	30500201		0.00000	5.00000	95.00000	10.70000	16.60000
P	30500201	FILTER	0.00000	5.00000	95.00000	13.70000	20.50000
P	30500201	SCRUBBER	0.00000	5.00000	95.00000	66.00000	20.50000
P	30500202		0.00000	0.00000	0.00000	26.20000	26.50000
P	30500202	FILTER	0.00000	0.00000	0.00000	15.30000	19.00000
P	30500308		0.00000	0.00000	0.00000	0.10000	8.90000
P	30500309		0.00000	0.00000	0.00000	16.00000	34.00000
P	30500311		0.00000	5.00000	95.00000	10.70000	16.60000
P	30500311	FILTER	0.00000	5.00000	95.00000	13.70000	20.50000
P	30500311	SCRUBBER	0.00000	5.00000	95.00000	66.00000	20.50000
P	30500399		0.00000	0.00000	0.00000	27.00000	41.00000
P	30500501		0.00000	0.00000	0.00000	20.80000	41.20000
P	30500502		0.00000	0.00000	0.00000	7.10000	16.70000
P	30500504		0.00000	5.00000	95.00000	20.80000	41.20000

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	30500599		0.00000	0.00000	0.00000	20.80000	41.20000
P	30500799		0.00000	0.00000	0.00000	4.30000	8.20000
P	30500802		0.00000	0.00000	0.00000	0.10000	8.90000
P	30501008		0.00000	0.00000	0.00000	0.00000	14.00000
P	30501011		0.00000	0.00000	0.00000	0.00000	14.00000
P	30501015		0.00000	0.00000	0.00000	0.00000	14.00000
P	30501101		0.00000	0.00000	0.00000	16.00000	34.00000
P	30501199		0.00000	0.00000	0.00000	28.50000	13.50000
P	30501203	SCRUBBER	0.00000	5.00000	95.00000	77.60000	5.50000
P	30501204		0.00000	0.00000	0.00000	77.60000	5.50000
P	30501204	FILTER	0.00000	0.00000	0.00000	77.60000	5.50000
P	30501204	SCRUBBER	0.00000	0.00000	0.00000	77.60000	5.50000
P	30501205	SCRUBBER	0.00000	0.00000	0.00000	77.60000	5.50000
P	30501299		0.00000	5.00000	95.00000	77.60000	5.50000
P	30501299	FILTER	0.00000	5.00000	95.00000	77.60000	5.50000
P	30501299	SCRUBBER	0.00000	5.00000	95.00000	77.60000	5.50000
P	30501401		0.00000	5.00000	95.00000	84.50000	5.50000
P	30501401	ESP	0.00000	5.00000	95.00000	45.50000	21.00000
P	30501410		0.00000	0.00000	0.00000	16.00000	34.00000
P	30501414		0.00000	5.00000	95.00000	84.50000	5.50000
P	30501414	ESP	0.00000	5.00000	95.00000	45.50000	21.00000
P	30501499		0.00000	0.00000	0.00000	28.00000	14.00000
P	30501502		0.00000	0.00000	0.00000	25.00000	35.50000
P	30501503		0.00000	3.00000	97.00000	22.00000	41.00000
P	30501504		0.00000	0.00000	0.00000	15.00000	34.00000
P	30501599	FILTER	0.00000	3.00000	97.00000	53.00000	26.00000
P	30501601		0.00000	0.00000	0.00000	25.00000	35.50000
P	30501602		0.00000	0.00000	0.00000	7.10000	16.70000
P	30501603	FILTER	0.00000	0.00000	0.00000	5.20000	49.40000
P	30501604		0.00000	0.00000	99.99999	12.50000	18.50000
P	30501607		0.00000	0.00000	0.00000	15.00000	34.00000
P	30501610		0.00000	0.00000	0.00000	28.00000	14.00000
P	30501612		0.00000	0.00000	0.00000	82.00000	15.00000
P	30501616	SCRUBBER	0.00000	0.00000	0.00000	77.60000	5.50000
P	30501699		0.00000	0.00000	0.00000	28.00000	14.00000
P	30502001		0.00000	0.00000	0.00000	7.10000	16.70000
P	30502002		0.00000	0.00000	0.00000	7.10000	16.70000
P	30502003		0.00000	0.00000	0.00000	7.10000	16.70000
P	30502006		0.00000	0.00000	0.00000	15.00000	34.00000
P	30502007		0.00000	0.00000	0.00000	28.00000	14.00000
P	30502013		0.00000	0.00000	0.00000	15.00000	34.00000
P	30502201		0.00000	0.00000	0.00000	0.10000	8.90000
P	30502699		0.00000	0.00000	0.00000	23.00000	39.00000
P	30504033		0.00000	0.00000	0.00000	9.60000	47.00000
P	30599999		0.00000	2.00000	98.00000	16.00000	34.00000
P	30600101		0.00000	6.00000	94.00000	33.20000	22.30000
P	30600102		0.00000	1.00000	99.00000	7.80000	20.30000
P	30600103		0.00000	6.00000	94.00000	33.20000	22.30000
P	30600104		0.00000	1.00000	99.00000	7.80000	20.30000
P	30600201		0.00000	3.00000	97.00000	33.00000	32.00000

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	30600202		0.00000	3.00000	97.00000	33.00000	32.00000
P	30600301		0.00000	3.00000	97.00000	33.00000	32.00000
P	30600401		0.00000	1.00000	99.00000	0.00000	0.00000
P	30600805		0.00000	0.00000	0.00000	82.00000	15.00000
P	30600901		0.00000	2.00000	98.00000	7.80000	20.30000
P	30601301		0.00000	5.00000	95.00000	33.00000	32.00000
P	30699998		0.00000	0.00000	99.99999	0.00000	0.00000
P	30699999		0.00000	5.00000	95.00000	25.00000	35.50000
P	30700401		0.00000	1.00000	99.00000	35.90000	51.40000
P	30700402		0.00000	1.00000	99.00000	35.90000	51.40000
P	30700499		0.00000	0.00000	0.00000	23.70000	20.80000
P	30700799		0.00000	0.00000	0.00000	23.70000	20.80000
P	30700899		0.00000	0.00000	0.00000	23.70000	20.80000
P	30702099		0.00000	0.00000	0.00000	23.70000	20.80000
P	30703098		0.00000	0.00000	0.00000	23.70000	20.80000
P	30799999		0.00000	0.00000	0.00000	23.70000	20.80000
P	30901009		0.00000	0.00000	0.00000	23.70000	20.80000
P	30902099		0.00000	0.00000	0.00000	80.00000	12.00000
P	30903004		0.00000	0.00000	0.00000	39.00000	15.00000
P	30903099		0.00000	0.00000	0.00000	80.00000	12.00000
P	30988801		0.00000	0.00000	0.00000	80.00000	12.00000
P	30999999		0.00000	0.00000	0.00000	6.90000	18.60000
P	33000019		0.00000	3.00000	97.00000	1.20000	3.80000
P	33000199		0.00000	0.00000	0.00000	94.00000	4.00000
P	33000299		0.00000	0.00000	0.00000	82.00000	15.00000
P	33000399		0.00000	0.00000	0.00000	23.00000	16.00000
P	39000431		0.00000	0.00000	0.00000	23.70000	20.80000
P	39000499		0.00000	3.00000	97.00000	0.00000	0.00000
P	39000509		0.00000	3.00000	97.00000	18.00000	38.00000
P	39000531		0.00000	0.00000	0.00000	9.80000	37.20000
P	39000599		0.00000	3.00000	97.00000	23.00000	16.00000
P	39000699		0.00000	3.00000	97.00000	20.80000	41.20000
P	39001099		0.00000	3.00000	97.00000	94.00000	4.00000
P	39099997		0.00000	3.00000	97.00000	0.00000	0.00000
P	39999999		0.00000	0.00000	0.00000	94.00000	4.00000
P	40100299		0.00000	0.00000	0.00000	16.00000	34.00000
P	40200101		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200104		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200105		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200401		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200405		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200406		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200501		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200599		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200801		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200802		0.00000	0.00000	0.00000	23.00000	16.00000
P	40200803		0.00000	0.00000	0.00000	23.00000	16.00000
P	40201101		0.00000	0.00000	0.00000	23.00000	16.00000
P	40202301		0.00000	0.00000	0.00000	82.00000	15.00000
P	40202306		0.00000	0.00000	0.00000	6.90000	18.60000
			0.00000	0.00000	0.00000	6.90000	18.60000

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	40299999		0.00000	0.00000	0.00000	6.90000	18.60000
P	40300103		0.00000	0.00000	0.00000	82.00000	15.00000
P	40300107		0.00000	0.00000	0.00000	82.00000	15.00000
P	40300152		0.00000	0.00000	0.00000	82.00000	15.00000
P	40300198		0.00000	0.00000	0.00000	82.00000	15.00000
P	40300199		0.00000	0.00000	0.00000	82.00000	15.00000
P	40300201		0.00000	0.00000	0.00000	82.00000	15.00000
P	40301021		0.00000	0.00000	0.00000	82.00000	15.00000
P	40399999		0.00000	0.00000	0.00000	80.00000	12.00000
P	40400199		0.00000	0.00000	0.00000	82.00000	15.00000
P	40400254		0.00000	0.00000	0.00000	82.00000	15.00000
P	40600126		0.00000	0.00000	0.00000	82.00000	15.00000
P	40600130		0.00000	0.00000	0.00000	82.00000	15.00000
P	40900199		0.00000	0.00000	0.00000	82.00000	15.00000
P	50100101		0.00000	0.00000	0.00000	82.00000	15.00000
P	50100506		0.00000	10.00000	90.00000	54.70000	33.70000
P	50200101		0.00000	10.00000	90.00000	54.70000	33.70000
P	50200505		0.00000	0.00000	0.00000	54.70000	33.70000
P	50200506		0.00000	0.00000	0.00000	54.70000	33.70000
P	50300101		0.00000	10.00000	90.00000	54.70000	33.70000
P	50300599		0.00000	10.00000	90.00000	54.70000	33.70000
P	50390010		0.00000	10.00000	90.00000	54.70000	33.70000
P	59999999		0.00000	0.00000	0.00000	54.70000	33.70000
K	080180001618		0.00000	10.00000	90.00000	0.00000	0.00000
K	080180002001		0.00000	5.00000	95.00000	33.00000	32.00000
K	310660045401		0.00000	2.00000	98.00000	82.00000	15.00000
K	310740048811		0.00000	5.00000	95.00000	45.50000	21.00000
K	310740088811		0.96154	0.00000	96.00000	49.50000	45.20000
K	310740088812		0.00000	0.00000	0.00000	23.00000	42.00000
K	311760034301		0.00000	0.00000	0.00000	23.00000	42.00000
K	311760048711		0.00000	1.00000	99.00000	82.00000	15.00000
K	311760048714		0.00000	1.00000	99.00000	73.80000	17.00000
K	312980004701		0.00000	1.00000	99.00000	73.80000	17.00000
K	312980004702		0.00000	1.96000	97.00000	37.00000	39.00000
K	312980004702		0.00000	1.96000	97.00000	37.00000	39.00000
K	314900009808		0.00000	1.96000	97.00000	37.00000	39.00000
K	391660002001		0.00000	1.96000	97.00000	37.00000	39.00000
K	392360001604		0.00000	0.00000	0.00000	77.60000	5.50000
K	392360003001		0.00000	5.00000	95.00000	33.20000	22.30000
K	392360003006		0.50847	0.00000	99.90699	0.00000	0.00000
K	392360003007		0.00000	6.00000	94.00000	70.00000	21.00000
K	392360003019		0.00000	6.00000	94.00000	70.00000	21.00000
K	396000001505		0.00000	6.00000	94.00000	70.00000	21.00000
K	396000001507		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000001509		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000002304		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000002306		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000002307		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000002308		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000003432		0.00000	0.00000	0.00000	77.60000	5.50000

LIST OF COMPONENT FACTORS

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
K	396000003438		0.00000	0.00000	0.00000	77.60000	5.50000
K	396000005921		0.00000	5.00000	95.00000	80.00000	12.00000

352 RECORDS PRINTED

LIST OF COMPONENT FACTORS

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	30501014		0.00000	0.00000	0.00000	2.70000	7.20000
P	30588801		0.00000	0.00000	0.00000	28.00000	14.00000
K	310740050301		0.00000	0.00000	0.00000	99.99999	0.00000
K	311760027001		0.00000	0.00000	0.00000	59.20000	20.90000
K	392360001201		0.00000	0.00000	0.00000	95.10000	3.30000
K	396000002001		0.00000	0.00000	0.00000	16.00000	24.00000
K	396000002101		0.00000	0.00000	0.00000	16.00000	24.00000
K	396000002301		0.00000	0.00000	0.00000	16.00000	24.00000
K	396000003401		0.00000	0.00000	0.00000	16.00000	24.00000
K	396000003401		0.00000	0.00000	0.00000	16.00000	24.00000

10 RECORDS PRINTED

12/01/84

LIST OF COMPONENT FACTORS

VALUES ARE PERCENTAGES

TYPE	KEY	EQUIP	SO4/TSP	SO4/SOX	SO2/SOX	SMALL PARTIC	LARGE PARTIC
P	90100111		0.00000	3.00000	97.00000	9.88000	19.45000
P	90100222		0.00000	3.00000	97.00000	9.88000	19.45000
P	90100330		0.00000	5.00000	95.00000	70.70000	9.40000
P	90100500		0.00000	1.00000	99.00000	99.99999	0.00000
P	90100600		0.00000	2.00000	98.00000	40.00000	22.00000
P	90200111		0.00000	3.00000	97.00000	9.88000	19.45000
P	90200222		0.00000	3.00000	97.00000	9.88000	19.45000
P	90200330		0.00000	5.00000	95.00000	70.70000	9.40000
P	90200440		0.00000	5.00000	95.00000	33.20000	22.30000
P	90200500		0.00000	1.00000	99.00000	99.99999	0.00000
P	90300111		0.00000	3.00000	97.00000	9.88000	19.45000
P	90300222		0.00000	3.00000	97.00000	9.88000	19.45000
P	90300330		0.00000	5.00000	95.00000	70.70000	9.40000
P	90300440		0.00000	5.00000	95.00000	33.20000	22.30000
P	90300500		0.00000	1.00000	99.00000	99.99999	0.00000
P	90401300		9.25000	0.00000	90.00000	19.60000	10.40000
P	90600700		0.00000	1.00000	99.00000	99.99999	0.00000
P	90600800		0.00000	1.00000	99.00000	99.99999	0.00000
P	90600900		0.00000	1.00000	99.00000	99.99999	0.00000
P	90700700		0.00000	1.00000	99.00000	95.00000	1.00000
P	90700800		0.00000	1.00000	99.00000	95.00000	1.00000
P	90702400		0.00000	1.00000	99.00000	95.00000	1.00000
P	90803100		0.00000	1.00000	99.00000	95.00000	1.00000
P	90803200		0.00000	1.00000	99.00000	99.99999	0.00000
P	90803300		0.00000	1.00000	99.00000	95.00000	1.00000
P	90900440		0.00000	5.00000	95.00000	33.20000	22.30000
P	90904230		0.00000	1.00000	99.00000	95.00000	1.00000
P	90904430		0.00000	1.00000	99.00000	99.99999	0.00000
P	91002400		0.00000	1.00000	99.00000	95.00000	1.00000
P	91207100		0.00000	0.00000	0.00000	16.00000	24.00000
P	91207200		0.00000	0.00000	0.00000	16.00000	24.00000
P	91207300		0.00000	0.00000	0.00000	35.00000	29.00000
P	91207400		0.00000	0.00000	0.00000	40.00000	24.00000
P	91308100		0.00000	0.00000	0.00000	85.00000	12.00000
P	91308200		0.00000	0.00000	0.00000	95.00000	4.80000
P	91308300		0.00000	1.00000	99.00000	99.99999	0.00000
P	91308400		0.00000	0.00000	0.00000	85.00000	12.00000
P	91308500		0.00000	0.00000	0.00000	95.00000	4.80000
P	91308500		0.00000	0.00000	0.00000	95.00000	4.80000

39 RECORDS PRINTED

APPENDIX G

TEMPORAL FILES

Point Sources - pages 479 - 560
IPFPE - pages 561 - 564
Area Sources - pages 565 - 606

1/04/85

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000701	0714	0.599800	0.416300	2.16919	0.00000	0.00000	0.00000	0.00000	0.10845	2.49457	3.90455
					5.74837	6.61605	6.50759	6.50759	6.72451	6.72451	6.61605	6.50759
K	080180000701	0715	0.614700	0.426700	6.50759	6.07375	6.39913	4.77223	5.42299	5.96529	3.14533	1.08459
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.22222
K	080180000701	0716	0.647900	0.449700	5.71428	6.45502	6.24338	6.13756	6.45502	6.56084	6.24338	6.24338
					6.24338	6.34920	6.24338	5.71428	6.34920	6.66666	6.13756	4.02116
K	080180000701	0717	0.636800	0.442000	2.20883	0.10040	0.00000	0.00000	0.00000	0.00000	0.00000	2.81124
					6.12449	6.22489	6.42570	6.42570	6.12449	6.02409	5.82329	6.02409
K	080180000701	0718	0.590600	0.410000	6.42570	6.32530	6.22489	6.12449	6.22489	6.32530	4.91967	3.11244
					2.55362	2.45148	0.20429	0.00000	0.00000	0.00000	0.00000	0.71501
K	080180000701	0719	0.683800	0.468600	4.39223	6.23084	6.43513	6.12870	6.12870	6.23084	6.02655	6.02655
					6.02655	6.12870	6.12870	6.12870	6.12870	5.92441	5.82226	4.18794
K	080180000701	0720	0.425200	0.291400	3.85462	0.44052	0.00000	0.00000	0.00000	0.00000	0.99118	2.86343
					3.19383	2.97356	3.85462	5.61674	6.82819	6.71806	6.38766	6.49779
K	080180000701	0721	0.164100	0.112400	6.93832	7.04845	6.49779	6.38766	6.49779	6.38766	6.38766	3.63436
					0.67178	0.00000	0.00000	0.00000	0.00000	0.00000	2.20729	4.99040
K	080180000701	0722	0.000000	0.000000	6.04606	6.04606	5.95009	5.85412	5.66218	6.14203	6.04606	5.85412
K	080180000701	0723	0.439000	0.300900	5.85412	5.66218	5.18234	5.56621	5.85412	6.04606	5.56621	4.79846
					1.69753	0.00000	0.00000	0.00000	0.00000	0.00000	2.16049	6.01851
K	080180000701	0724	0.117500	0.080500	9.25925	9.72222	9.25925	8.95061	9.25925	9.72222	9.56790	7.56172
					6.17283	4.16666	3.85802	2.62345	0.00000	0.00000	0.00000	0.00000
K	080180000701	0725	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.80000	10.40000
K	080180000701	0726	0.684400	0.472700	11.60000	14.00000	17.60000	12.80000	13.20000	15.20000	4.40000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000701	0727	0.726400	0.501700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.24215
					6.57698	8.66965	8.66965	8.66965	7.77279	5.82959	5.97907	5.82959
K	080180000701	0728	0.719500	0.497000	5.68011	7.02541	5.97907	5.08221	7.17488	5.82959	2.98953	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.55865	13.96648
K	080180000701	0729	0.594900	0.410900	14.52513	15.64245	26.81564	16.20111	12.29050	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000701	0730	0.342900	0.236800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10060	2.21327
					5.63380	5.93561	6.33802	6.13682	6.23742	6.33802	6.43863	6.33802
K	080180000701	0731	0.000000	0.000000	6.13682	5.93561	6.33802	6.13682	6.13682	6.13682	5.93561	5.53319
K	080180000701	0801	0.000000	0.000000	1.89573	0.00000	0.00000	0.00000	0.00000	0.00000	2.65402	5.11848
					5.78199	5.87677	5.87677	5.87677	5.68720	5.78199	5.78199	5.59241
					5.49763	5.68720	5.97156	6.06635	5.87677	5.59241	5.87677	3.50710
					0.00000	0.00000	0.00000	0.00000	0.00000	1.43540	2.67942	3.92344
					5.83732	6.02870	6.02870	6.02870	6.12440	6.31578	6.02870	6.02870
					5.93301	6.02870	5.93301	5.93301	5.83732	5.64593	5.64593	2.58373
					0.00000	0.00000	0.00000	0.00000	0.00000	0.69444	3.24074	3.58796
					4.86111	7.17592	7.17592	6.82870	5.20833	6.82870	6.36574	6.94444
					7.06018	7.29166	6.36574	5.09259	5.90277	6.36574	3.00925	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.20080	5.02008	5.42168
					11.04417	12.65060	12.65060	12.24899	9.63855	6.02409	5.62248	5.82329
					5.62248	5.82329	2.20883	0.00000	0.00000	0.00000	0.00000	0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000701	0802	0.302200	0.204800	0.00000	0.00000	0.00000	4.04255	5.74468	5.74468	5.10638	6.59574
					5.74468	5.31914	6.17021	8.72340	5.74468	5.53191	6.38297	11.48936
K	080180000701	0803	0.446900	0.302900	11.91489	5.74468	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000701	0804	0.261100	0.176900	0.43165	3.88489	6.90647	7.76978	8.20143	8.20143	8.48920	8.63309
					8.20143	7.91366	6.47482	7.19424	7.05035	5.89928	4.74820	0.00000
K	080180000701	0805	0.554900	0.376100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.98522	9.35960	15.02463
K	080180000701	0806	0.317000	0.214800	15.27093	10.83743	9.35960	9.85221	11.57635	11.33004	6.40394	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.46349	3.36037
K	080180000701	0807	0.000000	0.000000	4.63499	3.59212	3.24449	6.02549	6.72074	7.18424	7.06836	6.83661
K	080180000701	0808	0.000000	0.000000	7.41599	6.95249	7.18424	7.41599	7.41599	7.41599	6.14136	0.92699
K	080180000701	0809	0.666100	0.454000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.62271	5.07099
					5.27383	7.70791	8.31643	8.11359	6.89655	5.88235	9.33062	9.33062
K	080180000701	0810	0.633400	0.431700	6.28803	6.28803	6.28803	5.67951	6.28803	1.62271	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.19646	3.33988
K	080180000701	0811	0.185800	0.126700	4.22396	5.89390	6.38506	6.38506	6.48330	6.48330	6.48330	6.38506
					6.38506	6.48330	6.18860	6.18860	6.28683	6.18860	5.79567	4.22396
K	080180000701	0812	0.000000	0.000000	1.54958	0.00000	0.00000	0.00000	0.00000	0.00000	0.10330	3.40909
K	080180000701	0813	0.020300	0.013800	4.64876	6.50826	6.61157	6.40495	6.50826	6.50826	6.40495	6.61157
					6.61157	6.61157	6.61157	6.61157	6.71487	5.88842	3.40909	2.27272
K	080180000702	0714	0.913000	0.636300	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.70422	8.80281
					11.97183	16.19718	14.08450	13.73239	9.15492	13.38028	10.91549	1.05633
K	080180000702	0715	1.062300	0.740300	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000702	0716	1.075100	0.749300	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000702	0717	1.027900	0.716400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	19.35483	80.64516
					2.82352	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.64705
K	080180000702	0718	0.906500	0.631800	5.64705	7.05882	6.94117	6.94117	7.29411	7.29411	7.05882	6.94117
					6.94117	6.58823	6.70588	5.29411	5.76470	6.23529	2.82352	0.00000
K	080180000702	0719	1.115000	0.767200	0.00000	0.00000	0.00000	0.00000	0.00000	1.21334	2.52780	4.24671
					6.16784	6.06673	5.86450	5.76339	6.06673	6.16784	5.86450	5.86450
					5.86450	5.86450	5.96562	5.35894	5.96562	6.37007	5.66228	3.13447
					0.00000	0.00000	0.00000	0.00000	0.00000	0.69930	2.39760	3.99600
					6.09390	6.09390	6.49350	6.39360	5.99400	5.89410	5.69430	5.89410
					6.39360	6.09390	6.09390	5.99400	6.09390	6.19380	4.79520	2.69730
					0.31347	0.00000	0.00000	0.00000	0.00000	1.14942	2.61233	3.03030
					3.23928	6.26959	6.47857	6.16509	6.16509	6.26959	5.95611	6.06060
					6.06060	6.06060	6.16509	6.06060	6.16509	5.95611	5.74712	4.07523
					0.59241	0.00000	0.00000	0.00000	0.00000	1.30331	2.84360	2.96208
					2.96208	2.96208	2.84360	3.90995	7.10900	7.10900	6.87203	6.87203
					7.34597	7.46445	6.87203	6.75355	6.75355	6.75355	6.51658	3.19905
					0.00000	0.00000	0.00000	0.00000	0.00000	1.84645	2.23517	4.56754
					6.02526	6.02526	5.92808	5.83090	5.63654	6.41399	6.21963	5.83090
					5.83090	5.53935	5.15063	5.53935	5.83090	5.92808	5.53935	4.08163

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000702	0720	0.663100	0.456300	0.16339	0.00000	0.00000	0.00000	0.00000	1.96078	4.08496	6.04575
					9.64052	10.13071	9.47712	9.31372	8.33333	8.82352	9.15032	8.00653
K	080180000702	0721	0.272000	0.187100	6.37254	4.24836	3.75816	0.49019	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	3.98406	10.35856	9.96015
					9.56175	10.35856	17.92828	12.74900	12.35059	12.35059	0.39840	0.00000
K	080180000702	0722	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000702	0723	0.771500	0.530900								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.56179	3.08988	5.33707
					7.30337	8.00561	8.00561	8.00561	7.16292	5.33707	5.47752	5.33707
K	080180000702	0724	0.221000	0.152100	5.19662	6.46067	6.74157	4.77528	6.60112	5.33707	1.26404	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	2.94117	12.25490	13.23529
					12.74509	13.72549	23.03921	15.68627	6.37254	0.00000	0.00000	0.00000
K	080180000702	0725	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000702	0726	1.227800	0.851500								
					0.00000	0.00000	0.00000	0.00000	1.29629	2.31481	2.31481	4.35185
					5.46296	5.37037	5.83333	5.64814	5.64814	6.11111	6.01851	5.92592
K	080180000702	0727	1.134600	0.786800	5.55555	5.37037	5.83333	5.46296	5.55555	5.55555	5.37037	5.00000
					3.50701	1.40280	0.00000	0.00000	0.00000	0.00000	0.00000	1.80360
					5.11022	6.31262	6.31262	6.01202	5.71142	5.81162	5.91182	5.81162
K	080180000702	0728	1.127800	0.782100	5.71142	5.91182	6.31262	6.31262	6.01202	5.81162	6.11222	4.10821
					1.41129	0.00000	0.00000	0.00000	0.00000	0.00000	1.00806	3.62903
					5.94758	6.04838	6.04838	6.45161	6.25000	6.25000	6.04838	6.14919
K	080180000702	0729	0.898100	0.622800	5.74596	5.94758	6.04838	6.14919	6.04838	5.84677	5.64516	3.32661
					0.25316	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.75949
					4.93670	7.59493	7.84810	7.21518	7.34177	6.83544	6.96202	6.70886
K	080180000702	0730	0.555900	0.385500	6.83544	7.21518	6.58227	5.44303	6.32911	6.70886	3.54430	0.88607
					0.00000	0.00000	0.00000	0.00000	0.00000	4.70347	5.31697	5.31697
					10.63394	12.06543	11.86094	11.45194	9.81595	5.52147	4.70347	5.11247
K	080180000702	0731	0.000000	0.000000	4.90797	4.90797	3.68098	0.00000	0.00000	0.00000	0.00000	0.00000
K	080180000702	0801	0.000000	0.000000								
K	080180000702	0802	0.549900	0.374200								
					0.00000	0.00000	0.00000	0.00000	0.77220	4.63320	4.44015	5.79150
					5.21235	4.63320	7.14285	7.91505	8.49420	9.65250	10.23166	9.84555
K	080180000702	0803	0.896100	0.609800	10.23166	8.10810	2.89575	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.59241	3.19905	3.19905	3.19905
					3.31753	4.73933	5.56872	6.75355	6.39810	6.27962	6.87203	6.63507
K	080180000702	0804	0.836600	0.569300	6.75355	6.16113	5.68720	6.04265	6.51658	6.16113	5.09478	0.82938
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.14213	3.55329
					4.56852	6.59898	6.97969	7.36040	7.61421	8.24873	7.99492	7.74111
K	080180000702	0805	0.916200	0.623500	7.61421	5.32994	4.94923	4.69543	5.83756	5.71065	3.17258	0.88832
					0.00000	0.00000	0.00000	0.00000	0.00000	2.08574	2.78099	3.24449
					4.51911	3.47624	3.12862	5.79374	6.72074	6.72074	7.06836	6.72074
K	080180000702	0806	0.568000	0.386500	7.30011	6.83661	7.06836	7.30011	7.18424	7.30011	4.75086	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	4.29906	4.85981	4.48598
					4.67289	6.91588	7.47663	7.28971	6.72897	6.72897	8.22429	7.66355
K	080180000702	0807	0.000000	0.000000	5.42056	5.04672	4.67289	4.67289	5.42056	4.29906	1.12149	0.00000
K	080180000702	0808	0.000000	0.000000								

DAILY FACTORS IN PERCENTAGE OF YEAR (MAY DATE
HOURLY FACTORS IN PERCENTAGE OF DAY (MAY HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
*	0501660000702	0609	1.146300	0.784500	0.00000	0.00000	0.00000	0.00000	1.39917	2.31696	2.31696	3.52177
					4.07784	5.18999	5.56019	5.00000	0.74606	0.93161	6.02409	5.93141
*	0501660000702	0610	1.050200	0.718700	6.20945	6.11677	5.93141	5.83873	5.83873	5.83873	5.37534	3.33642
					0.30864	0.00000	0.00000	0.00000	0.00000	1.76897	2.77777	5.24691
*	0501660000702	0611	0.339300	0.232200	5.76131	6.27572	6.58436	6.58436	6.17283	5.86419	6.27572	5.96707
					5.86419	6.06995	5.96707	5.76131	6.06584	6.39979	3.90946	1.02880
					0.00000	0.00000	0.00000	0.00000	0.43690	0.59872	7.96178	8.59872
					11.46496	13.37579	12.40535	12.40535	9.65019	11.16669	3.82165	0.00000
*	0501660000702	0612	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
*	0501660000702	0613	0.000000	0.000000								
*	0501660000703	0714	0.874000	0.615400	4.87804	1.66991	0.00000	0.00000	0.00000	0.00000	0.00000	0.89439
					3.08943	5.69105	5.85365	5.77236	6.17886	6.17886	6.17886	6.26016
*	0501660000703	0715	0.659800	0.465400	6.17886	6.17886	6.17886	6.09756	6.09756	6.09756	5.77235	4.95934
					1.32231	0.00000	0.00000	0.00000	0.00000	0.00000	1.23966	4.87603
					6.28099	6.28099	6.28099	6.28099	5.78297	5.86776	5.53719	5.45454
*	0501660000703	0716	0.896700	0.631400	5.45454	5.61983	5.53719	5.45454	5.78512	6.03305	5.70247	5.70247
					1.34706	0.00000	0.00000	0.00000	0.00000	0.55467	3.01109	5.07131
					5.70522	5.62599	6.03114	5.70522	5.46761	5.30027	5.22979	5.38827
*	0501660000703	0717	0.953500	0.671500	5.86378	5.62599	5.62599	5.46761	5.46599	5.79522	5.62599	5.70522
					4.32190	3.60804	0.00000	0.00000	0.00000	0.00000	0.07451	2.98062
					5.29061	5.51415	5.66318	5.66318	5.66318	5.66318	5.66318	5.66318
*	0501660000703	0718	0.714100	0.502900	5.66318	5.66318	5.66318	5.66318	5.66318	5.66318	5.66318	5.58867
					7.46268	4.87562	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.47661	7.16417	7.56218	7.56218
*	0501660000703	0719	1.104600	0.768000	7.56218	7.56218	7.56218	7.56218	7.56218	7.56218	7.56218	6.76616
					4.73716	4.02336	3.46018	3.31666	3.31666	3.16166	2.72550	4.86696
					4.67229	4.67229	4.60799	4.60267	4.60267	4.99675	4.93186	4.93186
*	0501660000703	0720	0.917500	0.637900	4.93186	4.41271	4.34781	4.34781	4.34781	4.69739	4.28293	4.28293
					3.84687	3.98437	4.76562	4.61719	4.76562	4.67812	4.57812	4.45312
					5.31250	5.62500	5.93750	5.93750	5.93750	5.56687	5.78125	5.31250
*	0501660000703	0721	0.728300	0.506400	5.46875	5.15625	4.90187	4.90187	4.90187	5.28437	5.46875	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	3.95118	3.54330
					3.74015	4.52755	6.69291	6.69291	6.69291	7.48031	7.28346	7.48031
*	0501660000703	0722	0.816500	0.567700	7.38188	6.59448	6.59448	6.39764	6.72309	6.79133	6.03543	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.56609	3.16066
					5.35557	6.32133	6.05796	5.79455	6.10476	6.09692	6.40913	6.40913
*	0501660000703	0723	0.835100	0.580600	6.32133	6.05796	5.79455	6.23353	6.26872	6.40913	5.79455	2.10711
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.97424	5.86437
					6.09442	6.52360	6.52360	6.52360	6.69776	6.03690	6.09442	5.92274
*	0501660000703	0724	0.678100	0.471500	5.75107	5.66523	5.83690	5.75107	5.83690	6.09858	6.09858	2.14592
					0.00000	0.00000	0.00000	0.00000	0.00000	3.68837	3.38266	3.80549
					3.48837	4.01691	7.29366	7.29366	7.29366	6.56565	6.69682	6.65961
*	0501660000703	0725	0.503200	0.349900	7.82241	7.50528	6.76516	6.23618	6.91676	6.66829	0.95137	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	3.27635	0.97435	10.54131
					10.39886	10.11396	9.97156	9.82915	9.68675	10.11396	9.82905	7.54985
*	0501660000703	0726	0.967900	0.678200	1.70940	0.00000	0.00000	0.00000	0.00000	0.97770	2.33100	4.66200
					5.20509	5.20509	5.45299	5.70089	5.70089	5.70089	5.20529	5.20529
					5.74900	5.74900	5.82750	5.74900	5.74900	5.82750	5.74900	5.82750

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DAY
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SOZ	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
*	0501660000703	0727	1.019000	0.714600	3.83468	0.36675	0.00000	0.00000	0.00000	0.00000	1.67492	5.88849
					5.60471	5.60471	5.60471	5.60471	5.60471	5.60471	5.60471	5.60471
*	0501660000703	0728	0.651400	0.596400	5.45722	5.60471	5.60471	5.60471	5.60471	5.52097	5.60471	5.45722
					5.30035	0.53005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
*	0501660000703	0729	0.874800	0.560200	0.17667	3.62149	6.55719	6.71378	6.88232	7.06713	6.89045	6.89045
					6.71378	6.71378	6.40876	6.27168	6.16376	5.91872	5.91872	5.30035
					2.17983	0.00000	0.00000	0.00000	0.00000	0.00000	0.36330	2.54314
					4.17801	6.26702	6.90281	6.90281	6.90281	6.90281	6.90281	6.90281
					6.90281	6.90281	6.90281	6.63934	6.63934	6.90281	2.17983	0.00000
*	0501660000703	0730	0.000000	0.000000								
*	0501660000703	0731	0.000000	0.000000								
*	0501660000703	0801	0.370800	0.255800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	3.97727	6.61818	6.61818	7.09757	11.74242	13.06818
*	0501660000703	0802	0.759200	0.522000	12.87878	10.03787	9.66666	8.25000	9.06969	2.66212	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.94264	3.79278
					6.01295	2.96822	6.19796	6.19796	6.19796	6.19796	6.19796	6.29047
*	0501660000703	0803	0.892000	0.613300	6.84551	6.93882	6.36897	6.36897	6.19796	6.36297	5.18038	3.14523
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.83464	2.83464
					4.88168	5.74883	5.90555	6.06299	6.06299	6.06299	6.06299	6.06299
*	0501660000703	0804	0.992400	0.682400	6.06299	5.90551	5.74803	5.90625	5.90625	5.90625	6.06299	5.51181
					3.04317	2.68931	2.67699	2.67699	2.67699	2.68931	2.68931	2.68931
					5.02476	4.88322	5.04556	5.20781	5.20781	5.20785	5.16631	5.02476
*	0501660000703	0805	0.973500	0.669300	4.95399	5.02476	5.04556	5.04556	5.04556	4.88322	4.81245	2.68931
					2.81385	2.66955	2.66955	2.66955	2.66955	2.59760	2.65310	3.96825
					5.41125	5.31800	5.66666	5.97999	5.19680	5.61125	5.66340	4.90620
*	0501660000703	0806	0.876500	0.602700	5.33910	5.41125	5.41125	5.41125	5.61125	5.61125	5.19680	3.10245
					5.04607	4.56730	2.66666	3.19999	3.19999	2.96976	2.66461	4.40705
					5.44871	5.44871	5.66910	5.66997	5.36656	5.36656	5.36656	5.44871
					5.84935	5.44871	5.50544	5.66910	5.52669	5.06687	0.00012	0.00000
*	0501660000703	0807	0.000000	0.000000								
*	0501660000703	0808	0.000000	0.000000								
*	0501660000703	0809	0.856300	0.592100	0.00000	0.00000	0.00000	0.00000	0.17123	1.56109	3.08219	3.42465
					3.85273	3.85273	6.19509	6.00013	5.99310	6.73630	6.62123	6.33561
					6.07876	6.33561	6.50000	6.33561	6.62123	6.62123	6.62123	5.99315
*	0501660000703	0810	1.184300	0.819000	3.98310	3.92275	5.66135	5.66135	5.66135	5.63670	3.68135	4.34528
					4.52625	4.52625	4.52625	4.52625	4.38085	4.60555	4.46598	4.46598
*	0501660000703	0811	0.718300	0.496700	4.46598	4.46598	4.46598	4.66669	4.66669	4.68660	4.34528	4.34528
					1.49253	0.00000	0.00000	0.00000	0.00000	0.29850	3.18407	5.67164
					7.06467	7.36318	6.96517	7.36318	7.36368	6.96517	7.56218	6.06965
*	0501660000703	0812	0.573200	0.396400	6.06965	6.56716	6.37818	5.66999	6.56716	6.97512	0.29850	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.76812	3.86533	4.48877
					6.98254	7.85536	7.66666	8.66666	7.00000	9.22693	8.85286	5.48628
*	0501660000703	0813	0.625400	0.432500	4.61346	5.73566	6.36666	6.66677	6.66379	6.61366	0.37606	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.65714	4.11428
					5.48571	7.65714	7.31428	8.91162	7.77162	6.97162	7.54285	7.20000
					7.08571	6.28571	4.68571	0.00000	6.91018	0.00000	0.34285	0.00000
*	0501660000704	0714	0.000000	0.000000								
*	0501660000704	0715	0.000000	0.000000								
*	0501660000704	0716	0.000000	0.000000								
*	0501660000704	0717	0.000000	0.000000								
*	0501660000704	0718	0.000000	0.000000								

*	050180000704	0719	0.000000	0.000000
*	050180000704	0720	0.000000	0.000000
*	050180000704	0721	0.000000	0.000000
*	050180000704	0722	0.000000	0.000000
*	050180000704	0723	0.000000	0.000000
*	050180000704	0724	0.000000	0.000000
*	050180000704	0725	0.000000	0.000000
*	050180000704	0726	0.000000	0.000000
*	050180000704	0727	0.000000	0.000000
*	050180000704	0728	0.000000	0.000000
*	050180000704	0729	0.000000	0.000000
*	050180000704	0730	0.000000	0.000000
*	050180000704	0731	0.000000	0.000000
*	050180000704	0801	0.000000	0.000000
*	050180000704	0802	0.000000	0.000000
*	050180000704	0803	0.000000	0.000000
*	050180000704	0804	0.000000	0.000000
*	050180000704	0805	0.000000	0.000000
*	050180000704	0806	0.000000	0.000000
*	050180000704	0807	0.000000	0.000000
*	050180000704	0808	0.000000	0.000000
*	050180000704	0809	0.000000	0.000000
*	050180000704	0810	0.000000	0.000000
*	050180000704	0811	0.000000	0.000000
*	050180000704	0812	0.000000	0.000000
*	050180000704	0813	0.000000	0.000000

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000705	0714	0.386700	0.233100	4.50142	2.74928	[illegible]	[illegible]	[illegible]	[illegible]	1.78862	3.63247
					4.58689	5.42735	[illegible]	[illegible]	[illegible]	[illegible]	5.62735	5.44159
					5.42735	5.42735	[illegible]	[illegible]	[illegible]	[illegible]	4.47293	4.15954
K	080180000705	0715	0.354600	0.236200	1.89437	1.16249	[illegible]	[illegible]	[illegible]	[illegible]	1.65040	3.04615
					5.25258	5.46785	[illegible]	[illegible]	[illegible]	[illegible]	5.46785	5.48220
					5.46785	5.46785	[illegible]	[illegible]	[illegible]	[illegible]	5.48220	4.93685
K	080180000705	0716	0.375000	0.[illegible]49800	3.41973	2.87691	[illegible]	[illegible]	[illegible]	[illegible]	1.24847	3.09484
					4.90032	5.19744	[illegible]	[illegible]	[illegible]	[illegible]	5.10387	5.18387
					5.19744	5.18387	[illegible]	[illegible]	[illegible]	[illegible]	5.07631	4.46464
K	080180000705	0717	0.379100	0.252600	3.55656	3.24788	[illegible]	[illegible]	[illegible]	[illegible]	1.47631	2.24130
					4.14709	5.08656	[illegible]	[illegible]	[illegible]	[illegible]	5.11340	5.11340
					5.11340	5.11340	[illegible]	[illegible]	[illegible]	[illegible]	5.11340	4.88525
K	080180000705	0718	0.344000	0.229200	4.28930	1.52344	[illegible]	[illegible]	[illegible]	[illegible]	1.16846	1.86362
					3.69767	4.37805	[illegible]	[illegible]	[illegible]	[illegible]	5.65005	5.65005
					5.63526	5.65005	[illegible]	[illegible]	[illegible]	[illegible]	5.65005	5.17674
K	080180000705	0719	0.434400	0.285500	3.94968	3.54716	[illegible]	[illegible]	[illegible]	[illegible]	2.18467	4.36477
					4.79245	4.80503	[illegible]	[illegible]	[illegible]	[illegible]	5.03144	5.03144
					5.04402	4.85534	[illegible]	[illegible]	[illegible]	[illegible]	4.79245	4.60377
K	080180000705	0720	0.352600	0.231800	4.47784	3.37775	[illegible]	[illegible]	[illegible]	1.79733	1.82832	3.02138
					4.97365	5.85683	5.90331	5.91881	5.93430	5.90331	5.90331	5.82584
					5.59343	5.14409	4.74124	3.76510	3.74961	3.68763	2.63402	1.30151
K	080180000705	0721	0.302600	0.198900	1.46235	1.44430	1.44430	1.46235	1.53457	1.49846	1.46235	1.98591
					3.57465	4.89257	6.75212	5.72305	5.86748	6.51742	6.53547	6.53547
					6.82433	6.84239	6.12023	5.38003	4.65788	5.79526	3.62881	2.05813
K	080180000705	0722	0.346500	0.227700	1.22989	1.29296	1.27719	1.27719	1.27719	1.27719	1.26143	1.78177
					4.58845	5.72374	5.67644	5.96026	5.70797	5.86565	6.02333	6.02333
					6.03910	6.02333	5.86565	4.98265	5.42415	5.94449	5.59760	3.87890
K	080180000705	0723	0.352100	0.231400	1.78432	1.22575	1.22575	1.22575	1.21024	1.22575	1.21024	2.24980
					4.70131	5.98913	5.94259	5.81846	5.95810	5.94259	5.95810	5.92707
					5.92707	5.89604	5.86501	5.30643	5.77191	5.43056	4.84096	3.36695
K	080180000705	0724	0.248800	0.163500	3.11813	1.64690	1.75669	1.77865	1.77865	1.75669	1.75669	1.80061
					1.80061	2.08607	5.35792	7.04874	6.89503	5.53359	5.24813	5.42380
					6.65349	7.29029	6.43390	5.35792	6.01668	6.28019	4.47957	2.70092
K	080180000705	0725	0.280800	0.184600	1.67315	1.67315	1.63424	1.61478	1.63424	1.67315	1.69260	1.69260
					1.57587	1.55642	1.75097	4.63035	6.07003	5.15564	5.27237	6.24513
					7.31517	7.02334	7.04280	6.12840	6.92607	7.41245	7.08171	5.52529
K	080180000705	0726	0.420200	0.274600	2.69279	2.29804	1.72000	1.28295	1.15606	1.17016	1.17016	2.56591
					4.82165	5.47018	5.48428	5.61116	5.49837	5.44198	5.41378	5.35739
					5.35739	5.37149	5.37149	5.35739	5.39968	5.37149	5.37149	5.24460
K	080180000705	0727	0.438900	0.286800	4.22459	3.18531	2.33499	1.45768	1.06627	1.06627	1.39020	3.21230
					5.07490	5.16938	5.16938	5.16938	5.16938	5.16938	5.15589	5.15589
					5.16938	5.14239	5.14239	5.14239	5.14239	5.14239	5.14239	4.80496
K	080180000705	0728	0.453600	0.296400	4.00940	3.85268	2.95154	2.06347	1.11009	1.08397	1.68473	4.08776
					4.93665	5.06725	4.97583	4.97583	4.98889	4.97583	4.97583	5.06725
					5.01501	4.98889	5.00195	5.00195	4.96277	4.97583	4.97583	4.27060
K	080180000705	0729	0.404400	0.264300	3.45686	1.91885	1.21576	1.20111	1.18646	1.18646	1.18646	2.54870
					5.05346	5.66866	5.62472	5.62472	5.61007	5.62472	5.62472	5.62472
					5.62472	5.62472	5.62472	5.44895	5.47824	5.56613	4.76050	3.51545

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000705	0730	0.336000	0.219500	2.34526	1.42831	1.42831	1.37541	1.37541	1.41068	1.42831	3.03297
					5.69564	6.71839	6.70075	6.70075	6.45388	5.51930	5.51930	5.50167
K	080180000705	0731	0.275200	0.179900	5.50167	5.50167	5.50167	5.48404	5.73091	5.23717	2.75083	1.65755
					1.72191	1.70038	1.72191	1.70038	1.70038	1.72191	1.72191	1.67886
K	080180000705	0801	0.183700	0.120000	1.70038	2.62591	3.91734	6.06973	7.79164	6.56478	7.40421	7.66250
					6.13430	6.02668	5.14421	4.62763	5.94059	6.95221	4.11106	3.65906
K	080180000705	0802	0.293400	0.191700	2.16000	2.13333	2.10666	2.13333	2.10666	2.13333	2.13333	2.10666
					2.10666	2.13333	2.13333	2.21333	4.00000	4.37333	7.78666	8.26666
K	080180000705	0803	0.316400	0.206800	7.76000	7.06666	7.44000	6.48000	7.41333	5.97333	4.72000	3.12000
					1.36871	1.33533	1.30195	1.31864	1.31864	1.33533	1.30195	1.28526
K	080180000705	0804	0.314900	0.205800	2.88766	4.62360	5.64179	6.02570	6.19262	6.34284	6.32615	6.32615
					6.30946	6.32615	6.00901	5.47487	6.30946	6.07578	4.64029	3.92255
K	080180000705	0805	0.283900	0.185500	3.14241	1.53250	1.25386	1.26934	1.23839	1.26934	1.25386	1.70278
					3.96284	5.29411	5.57275	4.79876	5.18575	5.83591	5.85139	5.85139
K	080180000705	0806	0.292300	0.191000	5.88235	5.88235	5.77399	5.78947	5.85139	5.77399	5.47987	4.55108
					2.58205	1.29102	1.22880	1.24436	1.24436	1.24436	1.24436	1.74210
K	080180000705	0807	0.157500	0.102900	4.77523	5.83294	5.89516	5.91071	5.91071	6.03515	5.91071	5.77072
					5.91071	5.70850	5.27298	5.50629	5.52185	5.73961	4.74412	3.73308
K	080180000705	0808	0.173900	0.113600	2.08728	1.36277	1.36277	1.34552	1.36277	1.36277	1.36277	1.94928
					2.07003	2.69104	3.13955	4.17457	5.74435	6.45161	6.55511	6.57236
K	080180000705	0809	0.397700	0.266900	6.57236	6.57236	6.57236	6.57236	6.57236	6.55511	6.41711	4.57132
					5.02680	4.59115	2.39611	1.44101	1.34048	1.34048	1.34048	3.48525
K	080180000705	0810	0.480900	0.322800	5.26139	5.99865	6.08243	6.03217	6.03217	6.06568	6.18297	6.33378
					5.34517	5.16085	3.45174	3.92091	4.90951	4.03820	2.44638	1.77613
K	080180000705	0811	0.330500	0.221800	2.48833	2.48833	2.48833	2.48833	2.48833	2.51944	2.48833	2.51944
					2.61275	2.86158	2.86158	7.02954	5.62986	5.62986	5.59875	5.69206
K	080180000705	0812	0.249400	0.167400	6.74961	7.24727	5.50544	4.10575	5.19440	6.90513	3.70139	2.70606
					2.28104	2.25288	2.25288	2.25288	2.25288	2.28104	2.25288	2.22472
K	080180000705	0813	0.264900	0.177800	2.22472	2.22472	2.19656	2.28104	4.19600	5.06899	5.49141	6.87130
					7.77245	8.13855	6.87130	6.05463	6.25176	6.89946	6.27992	3.12588
K	080180000801	0714	0.052500	0.052500	1.21221	1.22717	1.19724	1.19724	1.19724	1.21221	1.25710	2.06524
					4.26519	5.64202	5.65698	5.68692	5.70188	5.70188	5.71685	5.70188
					5.82161	5.82161	5.71685	5.73181	5.70188	5.71685	5.70188	5.14815
					3.91089	3.82425	2.99504	2.99504	2.62376	2.26485	3.04455	4.45544
					4.69059	4.71534	4.71534	4.71534	4.70297	4.70297	4.70297	4.70297
					4.70297	4.70297	4.70297	4.71534	4.71534	4.71534	4.15841	3.82425
					4.37601	3.33153	1.90887	1.45867	1.45867	1.45867	2.79128	4.33999
					5.90671	6.51899	6.51899	6.53700	5.96074	6.46497	5.63659	4.52007
					4.41202	4.97028	4.61012	3.67368	5.45650	4.06987	2.21501	1.40464
					1.95657	1.98043	1.90885	1.90885	1.90885	1.90885	1.90885	1.90885
					3.34049	5.96516	7.85015	6.06060	5.96516	8.06490	8.30350	6.51395
					3.86542	4.91529	4.39036	3.84156	6.39465	4.55738	2.69625	1.88499
					1.77488	1.79734	1.77488	1.79734	1.79734	1.79734	1.79734	1.79734
					3.75196	6.94226	6.60525	6.17838	7.07706	6.22332	7.14446	6.82992
					5.39204	5.36957	4.96517	4.17883	6.08851	5.09997	2.08941	1.72994
					2.07612	1.98961	1.98961	2.07612	2.07612	3.28719	3.63321	3.80522
					5.19031	5.36332	5.36332	5.19031	5.19031	6.22837	6.48788	6.48788
					6.66089	5.96885	5.53633	4.32525	3.37370	3.28719	2.68166	1.73010

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000801	0715	0.054900	0.054900	1.47601	1.47601	1.40221	1.40221	1.40221	1.91881	2.87822	3.46863
					5.23985	5.75645	5.83025	5.53505	5.53505	5.53505	5.53505	5.75645
					5.97785	5.75645	5.83025	4.87084	4.79704	4.57564	4.72324	3.32103
K	080180000801	0716	0.049600	0.049600	1.75438	1.75438	1.75438	1.75438	1.75438	1.82456	2.94736	3.85964
					5.40350	5.47368	5.54385	5.89473	5.61403	5.54385	5.75438	5.61403
					5.61403	5.61403	5.61403	5.33333	4.91228	5.26315	3.64912	1.75438
K	080180000801	0717	0.047300	0.047300	1.89642	1.96936	1.96936	1.96936	1.82348	2.18818	3.20933	3.35521
					4.37636	4.74106	5.39752	5.47045	5.54339	5.47045	5.47045	5.47045
					5.54339	5.61633	5.54339	5.54339	5.68927	5.54339	4.30342	1.89642
K	080180000801	0718	0.048300	0.048300	2.03125	2.10937	2.18750	2.18750	2.18750	2.50000	3.59375	3.51562
					3.51562	3.59375	3.59375	4.53125	5.78125	5.93750	5.78125	5.78125
					6.01562	6.01562	5.93750	5.23437	5.46875	6.09375	4.45312	1.95312
K	080180000801	0719	0.055300	0.055300	1.65892	1.65892	1.65892	1.65892	1.99071	2.98606	3.05242	3.98142
					5.10948	5.44127	5.44127	5.37491	5.30856	5.90577	5.97213	5.24220
					5.17584	5.17584	5.17584	5.10948	5.10948	5.24220	4.77770	1.79163
K	080180000801	0720	0.040000	0.040000	2.64705	2.54901	2.54901	2.54901	2.54901	2.74509	4.31372	4.90196
					6.27450	7.05882	7.25490	7.25490	6.27450	6.37254	6.37254	5.98039
					4.31372	3.23529	2.35294	2.45098	2.45098	2.45098	2.54901	2.54901
K	080180000801	0721	0.055900	0.055900	3.36351	3.49288	3.49288	3.49288	3.49288	4.13971	6.08020	6.08020
					6.08020	6.33893	6.85640	3.62225	3.62225	3.62225	3.62225	3.62225
					3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225
K	080180000801	0722	0.056700	0.056700	4.14110	4.14110	4.14110	3.98773	4.14110	4.29447	4.29447	4.29447
					4.29447	4.29447	4.29447	4.14110	4.14110	4.14110	4.14110	4.14110
					4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	3.98773
K	080180000801	0723	0.053900	0.053900	2.49520	2.49520	2.59117	2.59117	2.68714	3.16698	4.41458	5.75815
					6.42994	6.62188	6.90978	7.58157	6.33397	4.51055	4.41458	4.31861
					4.41458	5.47024	3.74280	2.68714	2.59117	2.59117	2.59117	2.59117
K	080180000801	0724	0.055100	0.055100	4.17910	4.17910	4.17910	4.17910	4.32835	4.32835	4.32835	4.32835
					4.32835	4.32835	4.32835	4.32835	4.17910	4.17910	4.17910	4.17910
					4.17910	4.02985	4.02985	3.88059	3.88059	3.88059	4.02985	4.02985
K	080180000801	0725	0.052300	0.052300	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.32098	4.32098	4.32098	4.32098	4.32098	4.32098
					4.16666	4.32098	4.32098	4.16666	3.85802	3.85802	3.85802	3.85802
K	080180000801	0726	0.066500	0.066500	1.72413	1.65782	1.72413	1.85676	1.85676	1.98938	3.11671	4.44297
					4.50928	4.50928	5.10610	5.43766	5.43766	5.43766	5.43766	5.37135
					5.23872	5.23872	5.23872	5.30503	5.30503	5.30503	5.23872	3.51458
K	080180000801	0727	0.067500	0.067500	1.85312	1.92175	1.92175	1.92175	1.85312	2.05902	3.43170	4.52985
					4.80439	5.35346	5.28483	5.21619	5.21619	5.28483	5.28483	5.28483
					5.21619	5.28483	5.28483	5.28483	5.35346	5.14756	4.46122	2.74536
K	080180000801	0728	0.050400	0.050400	1.79760	1.79760	1.79760	1.79760	1.86418	2.19707	3.12916	3.12916
					4.66045	5.52596	5.72569	5.52596	5.52596	5.25965	5.05992	5.45938
					5.45938	5.32623	5.25965	5.25965	5.39280	5.39280	5.12649	2.52996
K	080180000801	0729	0.047200	0.047200	2.89699	2.89699	2.89699	2.89699	3.00429	3.00429	2.89699	3.00429
					2.89699	3.21888	6.54506	6.65236	4.82832	6.43776	5.25751	6.65236
					6.75965	6.86695	6.33047	2.89699	2.89699	2.78969	2.68240	2.78969
K	080180000801	0730	0.056300	0.056300	2.71398	2.71398	2.71398	2.92275	2.92275	3.13152	4.90605	5.01043
					6.57620	6.99373	7.09812	6.88935	5.01043	5.01043	5.01043	4.90605
					4.90605	3.54906	2.92275	2.81837	2.81837	2.81837	2.81837	2.81837

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000801	0731	0.050900	0.050900	4.10334	3.79939	3.79939	3.79939	4.10334	4.10334	4.10334	4.25531
					4.25531	4.25531	4.10334	4.10334	4.10334	4.10334	4.10334	4.25531
K	080180000801	0801	0.038200	0.038200	4.40729	4.40729	4.25531	4.25531	4.40729	4.40729	4.25531	4.25531
					4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.22322	4.07239
K	080180000801	0802	0.029900	0.029900	4.07239	4.07239	4.07239	4.07239	4.07239	4.22322	4.22322	4.22322
					4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.07239	4.22322
K	080180000801	0803	0.030900	0.030900	3.42639	3.55329	3.55329	3.55329	3.55329	4.18781	5.83756	5.96446
					5.96446	6.21827	6.09137	5.45685	3.68020	3.55329	3.55329	3.55329
K	080180000801	0804	0.037800	0.037800	3.55329	3.55329	3.42639	3.55329	3.55329	3.55329	3.55329	3.55329
					2.74509	2.74509	2.74509	2.74509	2.74509	3.23529	4.50980	4.60784
K	080180000801	0805	0.055900	0.055900	4.41176	4.50980	4.50980	4.50980	4.70588	5.58823	6.66666	6.37254
					6.56862	6.56862	5.29411	2.84313	2.84313	2.84313	2.84313	2.84313
K	080180000801	0806	0.059200	0.059200	2.76717	2.76717	2.76717	2.76717	2.76717	3.24427	4.48473	4.48473
					4.67557	5.82061	6.48854	6.58396	6.39312	6.48854	6.48854	6.29770
K	080180000801	0807	0.073300	0.073300	6.39312	4.48473	2.19465	2.19465	2.09923	2.29007	2.48091	2.57633
					2.27848	2.36286	2.36286	2.36286	2.27848	2.36286	2.27848	2.36286
K	080180000801	0808	0.063400	0.063400	2.27848	2.36286	2.86919	5.48523	6.07594	6.24472	6.24472	6.24472
					6.16033	6.32911	6.32911	6.24472	6.16033	6.07594	3.88185	2.36286
K	080180000801	0809	0.064500	0.064500	3.40632	3.40632	3.40632	3.28467	3.40632	4.25790	5.59610	5.47445
					5.71776	5.71776	5.71776	5.47445	5.47445	5.59610	4.25790	3.28467
K	080180000801	0810	0.067200	0.067200	3.28467	3.28467	3.28467	3.28467	3.28467	3.28467	3.40632	3.40632
					4.33436	4.33436	4.02476	4.17956	4.02476	4.17956	4.02476	4.02476
K	080180000801	0811	0.065000	0.065000	4.02476	4.17956	4.17956	4.17956	4.02476	4.02476	4.02476	4.17956
					4.33436	4.33436	4.33436	4.17956	4.33436	4.17956	4.17956	4.17956
K	080180000801	0812	0.058900	0.058900	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861
					4.08163	4.08163	4.08163	3.92464	3.92464	4.08163	4.23861	4.23861
K	080180000801	0813	0.058700	0.058700	4.23861	4.08163	4.23861	4.08163	4.08163	4.23861	4.23861	4.23861
					1.93826	1.86647	1.86647	1.93826	1.86647	1.86647	2.15362	3.66116
K	080180000802	0714	0.052500	0.052500	4.45082	4.73797	4.95333	5.52763	5.88657	5.95836	5.61478	5.59942
					5.74300	5.88657	5.74300	5.67121	5.67121	5.16870	4.23546	1.79468
K	080180000802	0715	0.054900	0.054900	1.67064	1.67064	1.67064	1.67064	1.67064	1.82975	3.02307	3.26173
					4.05727	5.64836	5.88703	6.28480	5.88703	5.96658	5.96658	5.96658
					5.96658	5.96658	5.96658	5.40970	5.17104	5.01193	2.62529	1.75019
					4.20875	4.37710	4.54545	4.54545	4.54545	4.37710	4.37710	4.37710
					4.37710	4.54545	4.20875	3.70370	3.70370	3.87205	4.04040	4.04040
					4.04040	4.04040	4.04040	4.04040	4.04040	3.87205	4.04040	4.04040
					4.05405	4.05405	4.05405	4.05405	4.22297	4.05405	4.05405	4.05405
					4.05405	4.05405	3.88513	3.88513	4.05405	4.39189	4.56081	4.56081
					4.56081	4.72972	4.56081	4.22297	4.05405	4.05405	3.88513	3.88513
					4.21052	4.21052	4.21052	4.21052	4.03508	4.03508	4.03508	4.03508
					4.03508	4.03508	4.03508	4.21052	4.21052	4.21052	4.21052	4.21052
					4.21052	4.38596	4.21052	4.21052	4.21052	4.21052	4.21052	4.21052
					2.07612	1.98961	1.98961	2.07612	2.07612	3.28719	3.63321	3.80622
					5.19031	5.36332	5.36332	5.19031	5.19031	6.22837	6.48788	6.48788
					6.66089	5.96885	5.53633	4.32525	3.37370	3.28719	2.68166	1.73010
					1.47601	1.47601	1.40221	1.40221	1.40221	1.91881	2.87822	3.46863
					5.23985	5.75645	5.83025	5.53505	5.53505	5.53505	5.53505	5.75645
					5.97785	5.75645	5.83025	4.87084	4.79704	4.57564	4.72324	3.32183

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000802	0716	0.049600	0.049600	1.75438	1.75438	1.75438	1.75438	1.75438	1.82456	2.94736	3.85964
					5.40350	5.47368	5.54385	5.89473	5.61403	5.54385	5.75438	5.61403
K	080180000802	0717	0.047300	0.047300	5.61403	5.61403	5.61403	5.33333	4.91228	5.26315	3.64912	1.75438
					1.89642	1.96936	1.96936	1.96936	1.82348	2.18818	3.20933	3.35521
K	080180000802	0718	0.048300	0.048300	4.37636	4.74106	5.39752	5.47045	5.54339	5.47045	5.47045	5.47045
					5.54339	5.61633	5.54339	5.54339	5.68927	5.54339	4.30342	1.89642
K	080180000802	0719	0.055300	0.055300	2.03125	2.10937	2.18750	2.18750	2.18750	2.50000	3.59375	3.51562
					3.51562	3.59375	3.59375	4.53125	5.78125	5.93750	5.78125	5.78125
K	080180000802	0720	0.040000	0.040000	6.01562	6.01562	5.93750	5.23437	5.46875	6.09375	4.45312	1.95312
					1.65892	1.65892	1.65892	1.65892	1.99071	2.98606	3.05242	3.98142
K	080180000802	0721	0.055900	0.055900	5.10948	5.44127	5.44127	5.37491	5.30856	5.90577	5.97213	5.24220
					5.17584	5.17584	5.17584	5.10948	5.10948	5.24220	4.77770	1.79163
K	080180000802	0722	0.056700	0.056700	2.64705	2.54901	2.54901	2.54901	2.54901	2.74509	4.31372	4.90196
					6.27450	7.05882	7.25490	7.25490	6.27450	6.37254	6.37254	5.98039
K	080180000802	0723	0.053900	0.053900	4.31372	3.23529	2.35294	2.45098	2.45098	2.45098	2.54901	2.54901
					3.36351	3.49288	3.49288	3.49288	3.49288	4.13971	6.08020	6.08020
K	080180000802	0724	0.055100	0.055100	6.08020	6.33893	6.85640	3.62225	3.62225	3.62225	3.62225	3.62225
					3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225
K	080180000802	0725	0.052300	0.052300	4.14110	4.14110	4.14110	3.98773	4.14110	4.29447	4.29447	4.29447
					4.29447	4.29447	4.29447	4.14110	4.14110	4.14110	4.14110	4.14110
K	080180000802	0726	0.066500	0.066500	4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	3.98773
					2.49520	2.49520	2.59117	2.59117	2.68714	3.16698	4.41458	5.75815
K	080180000802	0727	0.067500	0.067500	6.42994	6.62188	6.90978	7.58157	6.33397	4.51055	4.41458	4.31861
					4.41458	5.47024	3.74280	2.68714	2.59117	2.59117	2.59117	2.59117
K	080180000802	0728	0.050400	0.050400	4.17910	4.17910	4.17910	4.17910	4.32835	4.32835	4.32835	4.32835
					4.32835	4.32835	4.32835	4.32835	4.17910	4.17910	4.17910	4.17910
K	080180000802	0729	0.047200	0.047200	4.17910	4.02985	4.02985	3.88059	3.88059	3.88059	4.02985	4.02985
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
K	080180000802	0730	0.056300	0.056300	4.16666	4.16666	4.32098	4.32098	4.32098	4.32098	4.32098	4.32098
					4.16666	4.32098	4.32098	4.16666	3.85802	3.85802	3.85802	3.85802
K	080180000802	0731	0.050900	0.050900	1.72413	1.65782	1.72413	1.85676	1.85676	1.98938	3.11671	4.44297
					4.50928	4.50928	5.10610	5.43766	5.43766	5.43766	5.43766	5.37135
					5.23872	5.23872	5.23872	5.30503	5.30503	5.30503	5.23872	3.51458
					1.85312	1.92175	1.92175	1.92175	1.85312	2.05902	3.43170	4.52985
					4.80439	5.35346	5.28483	5.21619	5.21619	5.28483	5.28483	5.28483
					5.21619	5.28483	5.28483	5.28483	5.35346	5.14756	4.46122	2.74536
					1.79760	1.79760	1.79760	1.79760	1.86418	2.19707	3.12916	3.12916
					4.66045	5.52596	5.72569	5.52596	5.52596	5.25965	5.05992	5.45938
					5.45938	5.32623	5.25965	5.25965	5.39280	5.39280	5.12649	2.52996
					2.89699	2.89699	2.89699	2.89699	3.00429	3.00429	2.89699	3.00429
					2.89699	3.21888	6.54506	6.65236	4.82832	6.43776	5.25751	6.65236
					6.75965	6.86695	6.33047	2.89699	2.89699	2.78969	2.68240	2.78969
					2.71398	2.71398	2.71398	2.92275	2.92275	3.13152	4.90605	5.01043
					6.57620	6.99373	7.09812	6.88935	5.01043	5.01043	5.01043	4.90605
					4.90605	3.54906	2.92275	2.81837	2.81837	2.81837	2.81837	2.81837
					4.10334	3.79939	3.79939	3.79939	4.10334	4.10334	4.10334	4.25531
					4.25531	4.25531	4.10334	4.10334	4.10334	4.10334	4.10334	4.25531
					4.40729	4.40729	4.25531	4.25531	4.40729	4.40729	4.25531	4.25531

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000802	0801	0.038200	0.038200	4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.22322	4.07239
					4.07239	4.07239	4.07239	4.07239	4.07239	4.22322	4.22322	4.22322
K	080180000802	0802	0.029900	0.029900	4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.07239	4.22322
					3.42639	3.55329	3.55329	3.55329	3.55329	4.18781	5.83756	5.96446
K	080180000802	0803	0.030900	0.030900	5.96446	6.21827	6.09137	5.45685	3.68020	3.55329	3.55329	3.55329
					3.55329	3.55329	3.42639	3.55329	3.55329	3.55329	3.55329	3.55329
K	080180000802	0804	0.037800	0.037800	2.74509	2.74509	2.74509	2.74509	2.74509	3.23529	4.50980	4.60784
					4.41176	4.50980	4.50980	4.50980	4.70588	5.58823	6.66666	6.37254
K	080180000802	0805	0.055900	0.055900	6.56862	6.56862	5.29411	2.84313	2.84313	2.84313	2.84313	2.84313
					2.76717	2.76717	2.76717	2.76717	2.76717	3.24427	4.48473	4.48473
K	080180000802	0806	0.059200	0.059200	4.67557	5.82061	6.48854	6.58396	6.39312	6.48854	6.48854	6.29770
					6.39312	4.48473	2.19465	2.19465	2.09923	2.29007	2.48091	2.57633
K	080180000802	0807	0.073300	0.073300	2.27848	2.36286	2.36286	2.36286	2.27848	2.36286	2.27848	2.36286
					2.27848	2.36286	2.86919	5.48523	6.07594	6.24472	6.24472	6.24472
K	080180000802	0808	0.063400	0.063400	6.16033	6.32911	6.32911	6.24472	6.16033	6.07594	3.88185	2.36286
					3.40632	3.40632	3.40632	3.28467	3.40632	4.25790	5.59610	5.47445
K	080180000802	0809	0.064500	0.064500	5.71776	5.71776	5.71776	5.47445	5.47445	5.59610	4.25790	3.28467
					3.28467	3.28467	3.28467	3.28467	3.28467	3.28467	3.40632	3.40632
K	080180000802	0810	0.067200	0.067200	4.33436	4.33436	4.02476	4.17956	4.02476	4.17956	4.02476	4.02476
					4.02476	4.17956	4.17956	4.17956	4.02476	4.02476	4.02476	4.17956
K	080180000802	0811	0.065000	0.065000	4.33436	4.33436	4.33436	4.17956	4.33436	4.17956	4.17956	4.17956
					4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861
K	080180000802	0812	0.058900	0.058900	4.08163	4.08163	4.08163	3.92464	3.92464	4.08163	4.23861	4.23861
					4.23861	4.08163	4.23861	4.08163	4.08163	4.23861	4.23861	4.23861
K	080180000802	0813	0.058700	0.058700	1.93826	1.86647	1.86647	1.93826	1.86647	1.86647	2.15362	3.66116
					4.45082	4.73797	4.95333	5.52763	5.88657	5.95836	5.81478	5.59942
K	080180000803	0714	0.052500	0.052500	5.74300	5.88657	5.74300	5.67121	5.67121	5.16870	4.23546	1.79468
					1.67064	1.67064	1.67064	1.67064	1.67064	1.82975	3.02307	3.26173
K	080180000803	0715	0.054900	0.054900	4.05727	5.64836	5.88703	6.28480	5.88703	5.96658	5.96658	5.96658
					5.96658	5.96658	5.96658	5.40970	5.17104	5.01193	2.62529	1.75019
K	080180000803	0716	0.049600	0.049600	4.20875	4.37710	4.54545	4.54545	4.54545	4.37710	4.37710	4.37710
					4.37710	4.54545	4.20875	3.70370	3.70370	3.87205	4.04040	4.04040
					4.04040	4.04040	4.04040	4.04040	4.04040	3.87205	4.04040	4.04040
					4.05405	4.05405	4.05405	4.05405	4.22297	4.05405	4.05405	4.05405
					4.05405	4.05405	3.88513	3.88513	4.05405	4.39189	4.56081	4.56081
					4.56081	4.72972	4.56081	4.22297	4.05405	4.05405	3.88513	3.88513
					4.21052	4.21052	4.21052	4.21052	4.03508	4.03508	4.03508	4.03508
					4.03508	4.03508	4.03508	4.21052	4.21052	4.21052	4.21052	4.21052
					4.21052	4.38596	4.21052	4.21052	4.21052	4.21052	4.21052	4.21052
					2.07612	1.98961	1.98961	2.07612	2.07612	3.28719	3.63321	3.80622
					5.19031	5.36332	5.36332	5.19031	5.19031	6.22837	6.48788	6.48788
					6.66089	5.96885	5.53633	4.32525	3.37370	3.28719	2.68166	1.73010
					1.47601	1.47601	1.40221	1.40221	1.40221	1.91881	2.87822	3.46863
					5.23985	5.75645	5.83025	5.53505	5.53505	5.53505	5.53505	5.75645
					5.97785	5.75645	5.83025	4.87084	4.79704	4.57564	4.72324	3.32103
					1.75438	1.75438	1.75438	1.75438	1.75438	1.82456	2.94736	3.85964
					5.40350	5.47368	5.54385	5.89473	5.61403	5.54385	5.75438	5.61403
					5.61403	5.61403	5.61403	5.33333	4.91228	5.26315	3.64912	1.75438

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000803	0717	0.047300	0.047300	1.89642	1.96936	1.96936	1.96936	1.82348	2.18818	3.20933	3.35521
					4.37636	4.74106	5.39752	5.47045	5.54339	5.47045	5.47045	5.47045
K	080180000803	0718	0.048300	0.048300	5.54339	5.61633	5.54339	5.54339	5.68927	5.54339	4.30342	1.89642
					2.03125	2.10937	2.18750	2.18750	2.18750	2.50000	3.59375	3.51562
K	080180000803	0719	0.055300	0.055300	3.51562	3.59375	3.59375	4.53125	5.78125	5.93750	5.78125	5.78125
					6.01562	6.01562	5.93750	5.23437	5.46875	6.09375	4.45312	1.95312
K	080180000803	0720	0.040000	0.040000	1.65892	1.65892	1.65892	1.65892	1.99071	2.98606	3.05242	3.98142
					5.10948	5.44127	5.44127	5.37491	5.30856	5.90577	5.97213	5.24220
K	080180000803	0721	0.055900	0.055900	5.17584	5.17584	5.17584	5.10948	5.10948	5.24220	4.77770	1.79163
					2.64705	2.54901	2.54901	2.54901	2.54901	2.74509	4.31372	4.90196
K	080180000803	0722	0.056700	0.056700	6.27450	7.05882	7.25490	7.25490	6.27450	6.37254	6.37254	5.98039
					4.31372	3.23529	2.35294	2.45098	2.45098	2.45098	2.54901	2.54901
K	080180000803	0723	0.053900	0.053900	3.36351	3.49288	3.49288	3.49288	3.49288	4.13971	6.08020	6.08020
					6.08020	6.33893	6.85640	3.62225	3.62225	3.62225	3.62225	3.62225
K	080180000803	0724	0.055100	0.055100	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225
					4.14110	4.14110	4.14110	3.98773	4.14110	4.29447	4.29447	4.29447
K	080180000803	0725	0.052300	0.052300	4.29447	4.29447	4.29447	4.14110	4.14110	4.14110	4.14110	4.14110
					4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	3.98773
K	080180000803	0726	0.066500	0.066500	2.49520	2.49520	2.59117	2.59117	2.68714	3.16698	4.41458	5.75815
					6.42994	6.62188	6.90978	7.58157	6.33397	4.51055	4.41458	4.31861
K	080180000803	0727	0.067500	0.067500	4.41458	5.47024	3.74280	2.68714	2.59117	2.59117	2.59117	2.59117
					4.17910	4.17910	4.17910	4.17910	4.32835	4.32835	4.32835	4.32835
K	080180000803	0728	0.050400	0.050400	4.32835	4.32835	4.32835	4.32835	4.17910	4.17910	4.17910	4.17910
					4.17910	4.02985	4.02985	3.88059	3.88059	3.88059	4.02985	4.02985
K	080180000803	0729	0.047200	0.047200	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.32098	4.32098	4.32098	4.32098	4.32098	4.32098
K	080180000803	0730	0.056300	0.056300	4.16666	4.32098	4.32098	4.16666	3.85802	3.85802	3.85802	3.85802
					1.72413	1.65782	1.72413	1.65676	1.65676	1.98938	3.11671	4.44297
K	080180000803	0731	0.050900	0.050900	4.50928	4.50928	5.10610	5.43766	5.43766	5.43766	5.43766	5.37135
					5.23872	5.23872	5.23872	5.30503	5.30503	5.30503	5.23872	3.51458
K	080180000803	0801	0.038200	0.038200	1.85312	1.92175	1.92175	1.92175	1.85312	2.05902	3.43170	4.52985
					4.80439	5.35346	5.28483	5.21619	5.21619	5.28483	5.28483	5.28483
					5.21619	5.28483	5.28483	5.28483	5.35346	5.14756	4.46122	2.74536
					1.79760	1.79760	1.79760	1.79760	1.86418	2.19707	3.12916	3.12916
					4.66045	5.52596	5.72569	5.52596	5.52596	5.25965	5.05992	5.45938
					5.45938	5.32623	5.25965	5.25965	5.39280	5.39280	5.12649	2.52996
					2.89699	2.89699	2.89699	2.89699	3.00429	3.00429	2.89699	3.00429
					2.89699	3.21888	6.54506	6.65236	4.82832	6.43776	5.25751	6.65236
					6.75965	6.86695	6.33047	2.89699	2.89699	2.78969	2.68240	2.78969
					2.71398	2.71398	2.71398	2.92275	2.92275	3.13152	4.90605	5.01043
					6.57620	6.99373	7.09812	6.88935	5.01043	5.01043	5.01043	4.90605
					4.90605	3.54906	2.92275	2.81837	2.81837	2.81837	2.81837	2.81837
					4.10334	3.79939	3.79939	3.79939	4.10334	4.10334	4.10334	4.25531
					4.25531	4.25531	4.10334	4.10334	4.10334	4.10334	4.10334	4.25531
					4.40729	4.40729	4.25531	4.25531	4.40729	4.40729	4.25531	4.25531
					4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.22322	4.07239
					4.07239	4.07239	4.07239	4.07239	4.07239	4.22322	4.22322	4.22322
					4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.07239	4.22322

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000803	0802	0.029900	0.029900	3.42639	3.55329	3.55329	3.55329	3.55329	4.18781	5.83756	5.96446
					5.96446	6.21827	6.09137	5.45685	3.68020	3.55329	3.55329	3.55329
					3.55329	3.55329	3.42639	3.55329	3.55329	3.55329	3.55329	3.55329
K	080180000803	0803	0.030900	0.030900	2.74509	2.74509	2.74509	2.74509	2.74509	3.23529	4.50980	4.60784
					4.41176	4.50980	4.50980	4.50980	4.70588	5.58823	6.66666	6.37254
					6.56862	6.56862	5.29411	2.84313	2.84313	2.84313	2.84313	2.84313
K	080180000803	0804	0.037800	0.037800	2.76717	2.76717	2.76717	2.76717	2.76717	3.24427	4.48473	4.48473
					4.67557	5.82061	6.48854	6.58396	6.39312	6.48854	6.48854	6.29770
					6.39312	4.48473	2.19465	2.19465	2.09923	2.29007	2.48091	2.57633
K	080180000803	0805	0.055900	0.055900	2.27848	2.36286	2.36286	2.36286	2.27848	2.36286	2.27848	2.36286
					2.27848	2.36286	2.86919	5.48523	6.07594	6.24472	6.24472	6.24472
					6.16033	6.32911	6.32911	6.24472	6.16033	6.07594	3.88185	2.36286
K	080180000803	0806	0.059200	0.059200	3.40632	3.40632	3.40632	3.28467	3.40632	4.25790	5.59610	5.47445
					5.71776	5.71776	5.71776	5.47445	5.47445	5.59610	4.25790	3.28467
					3.28467	3.28467	3.28467	3.28467	3.28467	3.28467	3.40632	3.40632
K	080180000803	0807	0.073300	0.073300	4.33436	4.33436	4.02476	4.17956	4.02476	4.17956	4.02476	4.02476
					4.02476	4.17956	4.17956	4.17956	4.02476	4.02476	4.02476	4.17956
					4.33436	4.33436	4.33436	4.17956	4.33436	4.17956	4.17956	4.17956
K	080180000803	0808	0.063400	0.063400	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861
					4.08163	4.08163	4.08163	3.92464	3.92464	4.08163	4.23861	4.23861
					4.23861	4.08163	4.23861	4.08163	4.08163	4.23861	4.23861	4.23861
K	080180000803	0809	0.064500	0.064500	1.93826	1.86647	1.86647	1.93826	1.86647	1.86647	2.15362	3.66116
					4.45082	4.73797	4.95333	5.52763	5.88657	5.95836	5.81478	5.59942
					5.74300	5.88657	5.74300	5.67121	5.67121	5.16870	4.23546	1.79468
K	080180000803	0810	0.067200	0.067200	1.67064	1.67064	1.67064	1.67064	1.67064	1.82975	3.02307	3.26173
					4.05727	5.64836	5.88703	6.28480	5.88703	5.96658	5.96658	5.96658
					5.96658	5.96658	5.96658	5.40970	5.17104	5.01193	2.62529	1.75019
K	080180000803	0811	0.065000	0.065000	4.20875	4.37710	4.54545	4.54545	4.54545	4.37710	4.37710	4.37710
					4.37710	4.54545	4.20875	3.70370	3.70370	3.87205	4.04040	4.04040
					4.04040	4.04040	4.04040	4.04040	4.04040	3.87205	4.04040	4.04040
K	080180000803	0812	0.058900	0.058900	4.05405	4.05405	4.05405	4.05405	4.22297	4.05405	4.05405	4.05405
					4.05405	4.05405	3.88513	3.88513	4.05405	4.39189	4.56081	4.56081
					4.56081	4.72972	4.56081	4.22297	4.05405	4.05405	3.88513	3.88513
K	080180000803	0813	0.058700	0.058700	4.21052	4.21052	4.21052	4.2105	4.03508	4.03508	4.03508	4.03508
					4.03508	4.03508	4.03508	4.2105	4.21052	4.21052	4.21052	4.21052
					4.21052	4.38596	4.21052	4.21052	4.21052	4.21052	4.21052	4.21052
K	080180000804	0714	0.052500	0.052500	2.07612	1.98961	1.98961	2.07612	2.07612	3.28719	3.63321	3.80622
					5.19031	5.36332	5.36332	5.19031	5.19031	6.22837	6.48788	6.48788
					6.66089	5.96885	5.53633	4.32525	3.37370	3.28719	2.68166	1.73010
K	080180000804	0715	0.054900	0.054900	1.47601	1.47601	1.40221	1.40221	1.40221	1.91881	2.87822	3.46863
					5.23985	5.75645	5.83025	5.53505	5.53505	5.53505	5.53505	5.75645
					5.97785	5.75645	5.83025	4.87084	4.79704	4.57564	4.72324	3.32103
K	080180000804	0716	0.049600	0.049600	1.75438	1.75438	1.75438	1.75438	1.75438	1.82456	2.94736	3.85964
					5.40350	5.47368	5.54385	5.89473	5.61403	5.54385	5.75438	5.61403
					5.61403	5.61403	5.61403	5.33333	4.91228	5.26315	3.64912	1.75438
K	080180000804	0717	0.047300	0.047300	1.89642	1.96936	1.96936	1.96936	1.82348	2.18818	3.20933	3.35521
					4.37636	4.74106	5.39752	5.47045	5.54339	5.47045	5.47045	5.47045
					5.54339	5.61633	5.54339	5.54339	5.68927	5.54339	4.30342	1.89642

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000804	0718	0.048300	0.048300	2.03125	2.10937	2.18750	2.18750	2.18750	2.50000	3.59375	3.51562
					3.51562	3.59375	3.59375	4.53125	5.78125	5.93750	5.78125	5.78125
K	080180000804	0719	0.055300	0.055300	6.01562	6.01562	5.93750	5.23437	5.46875	6.09375	4.45312	1.95312
					1.65892	1.65892	1.65892	1.65892	1.99071	2.98606	3.05242	3.98142
K	080180000804	0720	0.040000	0.040000	5.10948	5.44127	5.44127	5.37491	5.30856	5.90577	5.97213	5.24220
					5.17584	5.17584	5.17584	5.10948	5.10948	5.24220	4.77770	1.79163
K	080180000804	0721	0.055900	0.055900	2.64705	2.54901	2.54901	2.54901	2.54901	2.74509	4.31372	4.90196
					6.27450	7.05882	7.25490	7.25490	6.27450	6.37254	6.37254	5.98039
K	080180000804	0722	0.056700	0.056700	4.31372	3.23529	2.35294	2.45098	2.45098	2.45098	2.54901	2.54901
					3.36351	3.49288	3.49288	3.49288	3.49288	4.13971	6.08020	6.08020
K	080180000804	0723	0.053900	0.053900	6.08020	6.33893	6.85640	3.62225	3.62225	3.62225	3.62225	3.62225
					3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225	3.62225
K	080180000804	0724	0.055100	0.055100	4.14110	4.14110	4.14110	3.98773	4.14110	4.29447	4.29447	4.29447
					4.29447	4.29447	4.29447	4.14110	4.14110	4.14110	4.14110	4.14110
K	080180000804	0725	0.052300	0.052300	4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	4.14110	3.98773
					2.49520	2.49520	2.59117	2.59117	2.68714	3.16698	4.41458	5.75815
K	080180000804	0726	0.066500	0.066500	6.42994	6.62188	6.90978	7.58157	6.33397	4.51055	4.41458	4.31861
					4.41458	5.47024	3.74280	2.68714	2.59117	2.59117	2.59117	2.59117
K	080180000804	0727	0.067500	0.067500	4.17910	4.17910	4.17910	4.17910	4.32835	4.32835	4.32835	4.32835
					4.32835	4.32835	4.32835	4.32835	4.17910	4.17910	4.17910	4.17910
K	080180000804	0728	0.050400	0.050400	4.17910	4.02985	4.02985	3.88059	3.88059	3.88059	4.02985	4.02985
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
K	080180000804	0729	0.047200	0.047200	4.16666	4.16666	4.32098	4.32098	4.32098	4.32098	4.32098	4.32098
					4.16666	4.32098	4.32098	4.16666	3.85802	3.85802	3.85802	3.85802
K	080180000804	0730	0.056300	0.056300	1.72413	1.65782	1.72413	1.85676	1.85676	1.98938	3.11671	4.44297
					4.50928	4.50928	5.10610	5.43766	5.43766	5.43766	5.43766	5.37135
K	080180000804	0731	0.050900	0.050900	5.23872	5.23872	5.23872	5.30503	5.30503	5.30503	5.23872	3.51458
					1.85312	1.92175	1.92175	1.92175	1.85312	2.05902	3.43170	4.52985
K	080180000804	0801	0.038200	0.038200	4.80439	5.35346	5.28483	5.21619	5.21619	5.28483	5.28483	5.28483
					5.21619	5.28483	5.28483	5.28483	5.35346	5.14756	4.46122	2.74536
K	080180000804	0802	0.029900	0.029900	1.79760	1.79760	1.79760	1.79760	1.86418	2.19707	3.12916	3.12916
					4.66045	5.52596	5.72569	5.52596	5.52596	5.25965	5.05992	5.45938
					5.45938	5.32623	5.25965	5.25965	5.39280	5.39280	5.12649	2.52996
					2.89699	2.89699	2.89699	2.89699	3.00429	3.00429	2.89699	3.00429
					2.89699	3.21888	6.54506	6.65236	4.82832	6.43776	5.25751	6.65236
					6.75965	6.86695	6.33047	2.89699	2.89699	2.78969	2.68240	2.78969
					2.71398	2.71398	2.71398	2.92275	2.92275	3.13152	4.90605	5.01043
					6.57620	6.99373	7.09812	6.88935	5.01043	5.01043	5.01043	4.90605
					4.90605	3.54906	2.92275	2.81837	2.81837	2.81837	2.81837	2.81837
					4.10334	3.79939	3.79939	3.79939	4.10334	4.10334	4.10334	4.25531
					4.25531	4.25531	4.10334	4.10334	4.10334	4.10334	4.10334	4.25531
					4.40729	4.40729	4.25531	4.25531	4.40729	4.40729	4.25531	4.25531
					4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.22322	4.07239
					4.07239	4.07239	4.07239	4.07239	4.07239	4.22322	4.22322	4.22322
					4.22322	4.07239	4.22322	4.22322	4.22322	4.22322	4.07239	4.22322
					3.42639	3.55329	3.55329	3.55329	3.55329	4.18781	5.83756	5.96446
					5.96446	6.21827	6.09137	5.45685	3.68020	3.55329	3.55329	3.55329
					3.55329	3.55329	3.42639	3.55329	3.55329	3.55329	3.55329	3.55329

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	080180000804	0803	0.030900	0.030900	2.74509	2.74509	2.74509	2.74509	2.74509	3.23529	4.50980	4.60784
					4.41176	4.50980	4.50980	4.50980	4.70588	5.58823	6.66666	6.37254
K	080180000804	0804	0.037800	0.037800	6.56862	6.56862	5.29411	2.84313	2.84313	2.84313	2.84313	2.84313
					2.76717	2.76717	2.76717	2.76717	2.76717	3.24427	4.48473	4.48473
K	080180000804	0805	0.055900	0.055900	4.67557	5.82061	6.48854	6.58396	6.39312	6.48854	6.[illegible]854	6.29770
					6.39312	4.48473	2.19465	2.19465	2.09923	2.29007	2.[illegible]	2.57633
K	080180000804	0806	0.059200	0.059200	2.27848	2.36286	2.36286	2.36286	2.27848	2.36286	2.2[illegible]	2.36286
					2.27848	2.36286	2.86919	5.48523	6.07594	6.24472	6.244	6.24472
K	080180000804	0807	0.073300	0.073300	6.16033	6.32911	6.32911	6.24472	6.16033	6.07594	3.88185	2.36286
					3.40632	3.40632	3.40632	3.28467	3.40632	4.25790	5.59610	5.47445
K	080180000804	0808	0.063400	0.063400	5.71776	5.71776	5.71776	5.47445	5.47445	5.59610	4.25790	3.28467
					3.28467	3.28467	3.28467	3.28467	3.28467	3.28467	3.40632	3.40632
K	080180000804	0809	0.064500	0.064500	4.33436	4.33436	4.02476	4.17956	4.02476	4.17956	4.02476	4.02476
					4.02476	4.17956	4.17956	4.17956	4.02476	4.02476	4.02476	4.17956
K	080180000804	0810	0.067200	0.067200	4.33436	4.33436	4.33436	4.17956	4.33436	4.17956	4.17956	4.17956
					4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861	4.23861
K	080180000804	0811	0.065000	0.065000	4.08163	4.08163	4.08163	3.92464	3.92464	4.08163	4.23861	4.23861
					4.23861	4.08163	4.23861	4.08163	4.08163	4.23861	4.23861	4.23861
K	080180000804	0812	0.058900	0.058900	1.93826	1.86647	1.86647	1.93826	1.86647	1.86647	2.15362	3.66116
					4.45082	4.73797	4.95333	5.52763	5.88657	5.95836	5.81478	5.59942
K	080180000804	0813	0.058700	0.058700	5.74300	5.88657	5.74300	5.67121	5.67121	5.16870	4.23546	1.79468
					1.67064	1.67064	1.67064	1.67064	1.67064	1.82975	3.02307	3.26173
					4.05727	5.64836	5.88703	6.28480	5.88703	5.96658	5.96658	5.96658
					5.96658	5.96658	5.96658	5.40970	5.17104	5.01193	2.62529	1.75019
					4.20875	4.37710	4.54545	4.54545	4.54545	4.37710	4.37710	4.37710
					4.37710	4.54545	4.20875	3.70370	3.70370	3.87205	4.04040	4.04040
					4.04040	4.04040	4.04040	4.04040	4.04040	3.87205	4.04040	4.04040
					4.05405	4.05405	4.05405	4.05405	4.22297	4.05405	4.05405	4.05405
					4.05405	4.05405	3.88513	3.88513	4.05405	4.39189	4.56081	4.56081
					4.56081	4.72972	4.56081	4.22297	4.05405	4.05405	3.88513	3.88513
					4.21052	4.21052	4.21052	4.21052	4.03508	4.03508	4.03508	4.03508
					4.03508	4.03508	4.03508	4.21052	4.21052	4.21052	4.21052	4.21052
					4.21052	4.38596	4.21052	4.21052	4.21052	4.21052	4.21052	4.21052
K	080180001619	0714	0.014203	0.014203								
K	080180001619	0715	0.014203	0.014203								
K	080180001619	0716	0.010797	0.010797								
K	080180001619	0717	0.010797	0.010797								
K	080180001619	0718	0.010797	0.010797								
K	080180001619	0719	0.010797	0.010797								
K	080180001619	0720	0.010797	0.010797								
K	080180001619	0721	0.010797	0.010797								
K	080180001619	0722	0.010797	0.010797								
K	080180001619	0723	0.006264	0.006264								
K	080180001619	0724	0.006264	0.006264								
K	080180001619	0725	0.006264	0.006264								
K	080180001619	0726	0.006264	0.006264								
K	080180001619	0727	0.006264	0.006264								
K	080180001619	0728	0.006264	0.006264								
K	080180001619	0729	0.010055	0.010055								
K	080180001619	0730	0.010055	0.010055								
K	080180001619	0731	0.010055	0.010055								

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K  080180001619  0801  0.010055  0.010055
K  080180001619  0802  0.010055  0.010055
K  080180001619  0803  0.010055  0.010055
K  080180001619  0804  0.015137  0.015137
K  080180001619  0805  0.015137  0.015137
K  080180001619  0806  0.015137  0.015137
K  080180001619  0807  0.015137  0.015137
K  080180001619  0808  0.015137  0.015137
K  080180001619  0809  0.015137  0.015137
K  080180001619  0810  0.015137  0.015137
K  080180001619  0811  0.015137  0.015137
K  080180001619  0812  0.015137  0.015137
K  080180001619  0813  0.007253  0.007253
K  080180001904  0714  0.000000  0.000000
K  080180001904  0719  0.000000  0.000000
K  080180001904  0720  0.000000  0.000000
K  080180001904  0721  0.000000  0.000000
K  080180001904  0726  0.000000  0.000000
K  080180001904  0727  0.000000  0.000000
K  080180001904  0728  0.000000  0.000000
K  080180001904  0802  0.000000  0.000000
K  080180001904  0803  0.000000  0.000000
K  080180001904  0804  0.000000  0.000000
K  080180001904  0809  0.000000  0.000000
K  080180001904  0810  0.000000  0.000000
K  080180001904  0811  0.000000  0.000000
K  080180003206  0714  0.065954  0.065954
K  080180003206  0715  0.093435  0.093435
K  080180003206  0716  0.130076  0.130076
K  080180003206  0717  0.204275  0.204275
K  080180003206  0718  0.225344  0.225344
K  080180003206  0719  0.223511  0.223511
K  080180003206  0720  0.248244  0.248244
K  080180003206  0721  0.218015  0.218015
K  080180003206  0722  0.247328  0.247328
K  080180003206  0723  0.192366  0.192366
K  080180003206  0724  0.170382  0.170382
K  080180003206  0725  0.132824  0.132824
K  080180003206  0726  0.130992  0.130992
K  080180003206  0727  0.150229  0.150229
K  080180003206  0728  0.172214  0.172214
K  080180003206  0729  0.114504  0.114504
K  080180003206  0730  0.124580  0.124580
K  080180003206  0731  0.100763  0.100763
K  080180003206  0801  0.124580  0.124580
K  080180003206  0802  0.143817  0.143817
K  080180003206  0803  0.164885  0.164885
K  080180003206  0804  0.070534  0.070534
K  080180003206  0805  0.088855  0.088855
K  080180003206  0806  0.097099  0.097099
K  080180003206  0807  0.112672  0.112672
K  080180003206  0808  0.102595  0.102595
K  080180003206  0809  0.120000  0.120000
K  080180003206  0810  0.150229  0.150229
K  080180003206  0811  0.093435  0.093435
K  080180003206  0812  0.130992  0.130992
K  080180003206  0813  0.118168  0.118168
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TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	3106600043005	0714	0.005726	2.454730	2.31404	0.49586	0.49586	0.49586	0.49586	0.49586	2.31404	5.61983
					5.61983	5.78512	5.78512	5.78512	5.95041	5.95041	5.95041	5.78512
K	3106600043005	0715	0.005981	2.564200	5.78512	5.78512	5.95041	4.62809	5.61983	4.95867	4.62809	3.30570
					0.31645	0.31645	0.31645	0.31645	0.31645	0.31645	3.14455	5.69620
K	3106600043005	0716	0.006758	2.896990	5.69620	5.69620	5.69620	5.69620	5.69620	5.69620	5.69620	5.69620
					5.69620	5.69620	5.69620	5.69620	5.69620	5.69620	5.69620	3.79746
K	3106600043005	0717	0.006426	2.754980	0.28011	0.42016	0.42016	0.42016	0.42016	1.96878	5.04201	5.04201
					5.04201	5.04201	5.04201	5.04201	5.04201	5.60224	5.60224	5.60224
K	3106600043005	0718	0.006578	2.819900	5.60224	5.60224	5.60224	5.60224	5.60224	5.60224	5.60224	4.76190
					0.44182	0.44182	0.44182	0.44182	0.44182	0.73637	0.73637	2.06185
K	3106600043005	0719	0.007429	3.185060	5.89101	5.89101	5.89101	5.89101	5.89101	5.89101	5.89101	5.89101
					5.89101	5.89101	5.89101	5.89101	5.89101	5.89101	5.89101	5.89101
K	3106600043005	0720	0.005063	2.170710	5.46762	2.87769	0.71942	0.57553	0.57553	0.57553	0.57553	0.57553
					3.16546	4.31654	5.75539	5.75539	5.75539	5.75539	5.75539	5.75539
K	3106600043005	0721	0.004798	2.057100	5.75539	5.75539	5.75539	5.75539	5.75539	5.75539	5.75539	5.75539
					3.28697	0.63211	0.50568	0.50568	0.50568	2.78128	5.30973	5.30973
K	3106600043005	0722	0.006682	2.864530	5.30973	5.05689	5.05689	5.05689	5.05689	5.05689	5.05689	5.05689
					5.05689	5.05689	5.05689	5.05689	5.05689	2.61682	5.05689	5.05689
K	3106600043005	0723	0.005783	2.479070	0.93457	0.93457	0.93457	0.93457	0.93457	2.61682	2.61682	7.47663
					7.47663	7.47663	7.47663	7.47663	7.47663	7.47663	7.47663	7.47663
K	3106600043005	0724	0.002915	1.249680	7.47663	5.23364	1.49532	1.49532	2.99065	1.86915	1.12149	1.12149
					1.57790	0.98619	0.98619	0.98619	0.98619	0.98619	0.98619	0.98619
K	3106600043005	0725	0.004221	1.809600	0.98619	3.94477	7.49506	6.90335	7.88954	7.88954	7.88954	7.88954
					7.88954	7.88954	7.88954	5.91715	5.12829	1.97238	1.97238	1.97238
K	3106600043005	0726	0.006663	2.856410	1.41643	2.26628	2.26628	2.26628	2.26628	2.26628	1.41643	2.26628
					5.66572	5.66572	5.66572	5.66572	5.66572	5.66572	5.66572	5.66572
K	3106600043005	0727	0.006455	2.767150	5.66572	5.66572	5.66572	3.68271	5.66572	5.66572	4.81586	1.41643
					0.81833	0.81833	0.81833	0.81833	0.81833	0.81833	0.81833	3.68065
K	3106600043005	0728	0.002915	1.249680	6.54664	6.54664	6.54664	6.54664	6.54664	6.54664	6.54664	6.54664
					6.54664	6.54664	4.90998	6.54664	6.54664	3.76432	2.61865	0.81833
K	3106600043005	0729	0.005262	2.255920	1.62337	1.62337	3.24675	3.24675	3.24675	3.24675	3.24675	3.24675
					3.24675	3.24675	12.98701	3.89610	3.89610	3.24675	3.24675	3.24675
					8.44155	12.33766	6.49350	2.59740	2.59740	2.59740	2.59740	2.59740
					1.79372	1.79372	1.79372	1.79372	1.79372	1.79372	1.12187	1.12187
					1.12107	1.12107	1.12107	4.93273	4.93273	1.34529	4.03587	7.39910
					8.96860	8.96860	8.96860	5.82959	8.96860	8.96860	7.17488	3.13901
					0.56818	0.56818	0.56818	0.56818	0.56818	0.56818	0.56818	5.39772
					5.39772	5.68181	5.68181	5.68181	5.68181	5.68181	5.68181	5.68181
					5.68181	5.68181	5.68181	5.68181	5.68181	5.68181	5.68181	5.68181
					0.58651	0.58651	0.58651	0.58651	0.58651	0.58651	0.58651	2.05270
					5.86510	5.86510	5.86510	5.86510	5.86510	5.86510	5.86510	5.86510
					5.86510	5.86510	5.86510	5.86510	5.86510	5.86510	5.86510	5.86510
					2.66666	2.66666	2.66666	1.66666	1.66666	6.66666	13.33333	13.33333
					0.00000	0.00000	0.00000	7.33333	0.00000	13.33333	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.66666
					2.51798	3.59712	3.59712	5.39568	6.47482	3.23741	1.07913	3.95683
					7.19424	7.19424	7.19424	7.19424	7.19424	7.19424	3.95683	1.43804
					3.23741	3.23741	3.23741	3.23741	3.23741	3.23741	1.07913	1.07913

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	310660043005	0730	0.003559	1.525580	1.06382	1.06382	1.06382	1.06382	1.06382	1.06382	1.06382	1.06382
					3.72340	6.64893	6.64893	3.72340	5.31914	5.31914	5.31914	7.97872
					7.97872	7.97872	7.97872	7.97872	7.97872	2.65957	2.12765	2.12765
K	310660043005	0731	0.000000	0.000000								
K	310660043005	0801	0.001709	0.073030								
K	310660043005	0802	0.006209	2.661660	2.43902	3.50609	3.50609	2.74390	0.91463	0.91463	0.91463	1.52439
					2.74390	4.87804	6.09756	6.09756	6.09756	6.09756	6.09756	6.09756
					6.09756	6.09756	6.09756	6.09756	6.09756	6.09756	1.37195	1.37195
K	310660043005	0803	0.006228	2.669770	0.91185	0.91185	0.91185	0.91185	0.91185	0.91185	0.91185	0.91185
					6.07902	6.07902	6.07902	6.07902	6.07902	6.07902	6.07902	6.07902
					6.07902	6.07902	6.07902	6.07902	6.07902	6.07902	5.16717	2.43161
K	310660043005	0804	0.005839	2.503420	1.55520	1.55520	1.55520	1.55520	1.55520	1.55520	1.55520	1.55520
					3.42146	6.22083	6.22083	6.22083	6.22083	6.22083	6.22083	6.22083
					6.22083	6.22083	6.22083	6.22083	6.22083	5.90979	2.79837	0.77760
K	310660043005	0805	0.006398	2.742810	0.59171	0.59171	0.59171	0.59171	0.59171	0.59171	0.59171	5.91715
					5.91715	5.91715	5.91715	5.91715	5.91715	5.91715	5.91715	5.91715
					5.91715	5.91715	5.91715	5.91715	5.91715	5.91715	5.91715	1.18343
K	310660043005	0806	0.004770	2.044930	1.38888	1.38888	1.38888	1.38888	1.38888	1.38888	1.38888	5.15873
					7.93650	7.93650	7.93650	7.93650	7.93650	7.93650	7.93650	7.93650
					7.93650	3.96825	1.58730	1.58730	5.15873	1.38888	0.00000	0.00000
K	310660043005	0807	0.000000	0.000000								
K	310660043005	0808	0.000000	0.000000								
K	310660043005	0809	0.006857	2.596740	0.00000	0.00000	1.58730	2.85714	3.80952	2.53968	1.58730	3.17460
					6.34920	6.34920	6.34920	6.34920	6.34920	6.34920	6.34920	4.76190
					4.76190	4.76190	4.76190	4.76190	4.76190	3.80952	3.80952	3.80952
K	310660043005	0810	0.005150	2.211290	1.46788	0.91743	0.91743	0.91743	0.91743	0.91743	2.28183	4.77064
					4.77064	4.77064	6.60550	5.87155	4.77064	5.87155	5.87155	5.87155
					5.87155	5.87155	5.87155	5.87155	5.87155	5.87155	4.48366	2.93577
K	310660043005	0811	0.004770	2.044930	2.77777	2.77777	2.77777	2.77777	2.77777	2.77777	2.77777	2.77777
					6.34920	6.34920	6.34920	6.74603	5.15873	4.36507	5.95238	4.36507
					4.36507	5.55555	4.36507	3.57142	3.57142	3.57142	3.57142	3.57142
K	310660043005	0812	0.003104	1.330830	5.48780	5.48780	5.48780	5.48780	5.48780	5.48780	5.48780	5.48780
					9.14634	9.14634	6.09756	2.43902	2.43902	2.43902	2.43902	2.43902
					2.43902	2.43902	2.43902	2.43902	2.43902	2.43902	2.43902	2.43902
K	310660043005	0813	0.003029	1.298370	2.50000	2.50000	6.25000	8.43750	4.37500	4.37500	4.37500	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	9.37500	7.50000	6.25000
					1.87500	1.87500	1.87500	1.87500	3.75000	0.93750	0.93750	0.93750
K	310660043007	0714	0.000000	0.000000								
K	310660043007	0715	0.000000	0.000000								
K	310660043007	0716	0.058529	0.041327	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	22.85714	22.85714	22.85714
					22.85714	1.71428	1.71428	1.71428	1.71428	0.00000	0.00000	0.00000
K	310660043007	0717	0.010702	0.007557	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000
					6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000
K	310660043007	0718	0.009365	0.006612	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	7.14285	7.14285	7.14285	7.14285	7.14285	7.14285
					7.14285	7.14285	7.14285	7.14285	7.14285	7.14285	7.14285	7.14285

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	3106660043007	0719	0.248797	0.175672	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.27855	0.27855
					0.27855	12.81337	12.81337	11.42061	11.42061	12.53481	12.53481	12.53481
K	3106660043007	0720	0.012709	0.008974	11.14206	0.27855	0.27855	0.27855	0.27855	0.27855	0.27855	0.27855
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	5.26315
					10.52631	10.52631	10.52631	10.52631	10.52631	10.52631	10.52631	10.52631
K	3106660043007	0721	0.000000	0.000000	10.52631	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0722	0.018729	0.013224								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					5.35714	5.35714	5.35714	5.35714	5.35714	5.35714	12.50000	12.50000
K	3106660043007	0723	0.013378	0.009446	12.50000	12.50000	3.57142	0.00000	7.14285	7.14285	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					5.00000	17.50000	17.50000	17.50000	17.50000	5.00000	5.00000	5.00000
K	3106660043007	0724	0.000000	0.000000	5.00000	5.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0725	0.002007	0.001417								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0726	0.154736	0.109257	33.33333	33.33333	33.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.87719	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0727	0.000000	0.000000	17.54385	16.66666	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0728	0.002676	0.001889								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					50.00000	50.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0729	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0730	0.000000	0.000000								
K	3106660043007	0731	0.000000	0.000000								
K	3106660043007	0801	0.000000	0.000000								
K	3106660043007	0802	0.015050	0.010627								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	4.66666	4.66666	4.66666	33.33333	26.66666
K	3106660043007	0803	0.040803	0.028810	8.88888	8.88888	6.88888	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	3.27868	9.83606	6.55737	6.55737	26.59836	16.39344	0.19672
K	3106660043007	0804	0.093312	0.065886	3.27868	3.27868	3.27868	3.27868	3.27868	0.19672	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	2.15053	2.15053	2.15053	5.81792	5.81792	5.81792
K	3106660043007	0805	0.062208	0.043924	22.93906	22.93906	22.93906	8.60215	1.07526	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	5.37634
					27.95698	20.43010	2.15053	3.22580	3.22580	6.45161	6.45161	6.45161
K	3106660043007	0806	0.087358	0.005195	2.15053	3.22580	3.22580	3.22580	3.22580	3.22580	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	9.09090	9.09090	9.09090	0.00000	0.00000	45.45454	27.27272
K	3106660043007	0807	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	3106660043007	0808	0.000000	0.000000								
K	3106660043007	0809	0.000027	0.005668								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	25.00000	12.50000	12.50000	25.00000	25.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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K  310660043007  0813  0.000000  0.000000
K  310660043008  0714  0.000000  0.000000
K  310660043058  0715  0.000000  0.000000
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TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	310660043008	0716	0.058529	0.041327	0.00000 0.00000 22.85714	0.00000 0.00000 1.71428	0.00000 0.00000 1.71428	0.00000 0.00000 1.71428	0.00000 0.00000 1.71428	0.00000 22.85714 1.71428	0.00000 22.85714 0.00000	0.00000 22.85714 0.00000
K	310660043008	0717	0.010702	0.007557	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000	0.00000 6.25000 6.25000
K	310660043008	0718	0.009365	0.006612	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285	0.00000 0.00000 7.14285
K	310660043008	0719	0.248797	0.175672	0.00000 0.27855 11.14206	0.00000 12.81337 0.27855	0.00000 12.81337 0.27855	0.00000 11.42061 0.27855	0.00000 11.42061 0.27855	0.00000 12.53481 0.27855	0.00000 12.53481 0.27855	0.00000 12.53481 0.27855
K	310660043008	0720	0.012709	0.008974	0.00000 10.52631 10.52631	0.00000 10.52631 0.00000	0.00000 10.52631 0.00000	0.00000 10.52631 0.00000	0.00000 10.52631 0.00000	0.00000 10.52631 0.00000	0.00000 10.52631 0.00000	0.00000 5.26315 10.52631
K	310660043008	0721	0.000000	0.000000								
K	310660043008	0722	0.018729	0.013224	0.00000 5.35714 12.50000	0.00000 5.35714 12.50000	0.00000 5.35714 3.57142	0.00000 5.35714 0.00000	0.00000 5.35714 7.14285	0.00000 5.35714 7.14285	0.00000 12.50000 0.00000	0.00000 12.50000 0.00000
K	310660043008	0723	0.013378	0.009446	0.00000 5.00000 5.00000	0.00000 17.50000 5.00000	0.00000 17.50000 0.00000	0.00000 17.50000 0.00000	0.00000 17.50000 0.00000	0.00000 5.00000 0.00000	0.00000 5.00000 0.00000	0.00000 5.00000 0.00000
K	310660043008	0724	0.000000	0.000000								
K	310660043008	0725	0.002007	0.001417	0.00000 0.00000 33.33333	0.00000 0.00000 33.33333	0.00000 0.00000 33.33333	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000
K	310660043008	0726	0.154736	0.109257	0.00000 0.00000 17.54385	0.00000 0.00000 16.66666	0.00000 0.87719 0.00000	0.00000 0.87719 0.00000	0.00000 15.35087 0.00000	0.00000 15.35087 0.00000	0.00000 16.66666 0.00000	0.00000 16.66666 0.00000
K	310660043008	0727	0.000000	0.000000								
K	310660043008	0728	0.002676	0.001889	0.00000 50.00000 0.00000	0.00000 50.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000	0.00000 0.00000 0.00000
K	310660043008	0729	0.000000	0.000000								
K	310660043008	0730	0.000000	0.000000								
K	310660043008	0731	0.000000	0.000000								
K	310660043008	0801	0.000000	0.000000								
K	310660043008	0802	0.015050	0.010627	0.00000 0.00000 8.88888	0.00000 0.00000 8.88888	0.00000 0.00000 8.88888	0.00000 4.44444 0.00000	0.00000 4.44444 0.00000	0.00000 4.44444 0.00000	0.00000 33.33333 0.00000	0.00000 26.66666 0.00000
K	310660043008	0803	0.040803	0.028810	0.00000 0.00000 3.27868	0.00000 3.27868 3.27868	0.00000 9.83606 3.27868	0.00000 6.55737 3.27868	0.00000 6.55737 3.27868	0.00000 24.59016 8.19672	0.00000 16.39344 0.00000	0.00000 8.19672 0.00000
K	310660043008	0804	0.093312	0.065886	0.00000 0.00000 22.93906	0.00000 0.00000 22.93906	0.00000 2.15053 22.93906	0.00000 2.15053 8.60215	0.00000 2.15053 1.07526	0.00000 5.01792 0.00000	0.00000 5.01792 0.00000	0.00000 5.01792 0.00000
K	310660043008	0805	0.062208	0.043924	0.00000 27.95698 2.15053	0.00000 20.43010 3.22580	0.00000 2.15053 3.22580	0.00000 3.22580 3.22580	0.00000 3.22580 3.22580	0.00000 6.45161 3.22580	0.00000 6.45161 0.00000	5.37634 6.45161 0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	310660043008	0806	0.007358	0.005195	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	9.09090	9.09090	9.09090	0.00000	0.00000	45.45454	27.27272
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043008	0807	0.000000	0.000000								
K	310660043008	0808	0.000000	0.000000								
K	310660043008	0809	0.008027	0.005668	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	25.00000	12.50000	12.50000	25.00000	25.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043008	0810	0.000000	0.000000								
K	310660043008	0811	0.000000	0.000000								
K	310660043008	0812	0.000000	0.000000								
K	310660043008	0813	0.000000	0.000000								
K	310660043009	0714	0.000000	0.000000								
K	310660043009	0715	0.000000	0.000000								
K	310660043009	0716	0.058529	0.041327	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	22.85714	22.85714	22.85714
					22.85714	1.71428	1.71428	1.71428	1.71428	1.71428	0.00000	0.00000
K	310660043009	0717	0.010702	0.007557	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000
					6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000	6.25000
K	310660043009	0718	0.009365	0.006612	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	7.14285	7.14285	7.14285	7.14285	7.14285	7.14285
					7.14285	7.14285	7.14285	7.14285	7.14285	7.14285	7.14285	7.14285
K	310660043009	0719	0.248797	0.175672	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.27855	0.27855
					0.27855	12.81337	12.81337	11.42061	11.42061	12.53481	12.53481	12.53481
					11.14206	0.27855	0.27855	0.27855	0.27855	0.27855	0.27855	0.27855
K	310660043009	0720	0.012709	0.008974	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	5.26315
					10.52631	10.52631	10.52631	10.52631	10.52631	10.52631	10.52631	10.52631
					10.52631	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0721	0.000000	0.000000								
K	310660043009	0722	0.018729	0.013224	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					5.35714	5.35714	5.35714	5.35714	5.35714	5.35714	12.50000	12.50000
					12.50000	12.50000	3.57142	0.00000	7.14285	7.14285	0.00000	0.00000
K	310660043009	0723	0.013378	0.009446	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					5.00000	17.50000	17.50000	17.50000	17.50000	5.00000	5.00000	5.00000
					5.00000	5.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0724	0.000000	0.000000								
K	310660043009	0725	0.002007	0.001417	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					33.33333	33.33333	33.33333	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0726	0.154736	0.109257	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.87719	0.87719	15.35087	15.35087	16.66666	16.66666
					17.54385	16.66666	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0727	0.000000	0.000000								
K	310660043009	0728	0.002676	0.001889	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					50.00000	50.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0729	0.000000	0.000000								
K	310660043009	0730	0.000000	0.000000								
K	310660043009	0731	0.000000	0.000000								
K	310660043009	0601	0.000000	0.000000								

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	310660043009	0802	0.015050	0.010627	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	4.44444	4.44444	4.44444	33.33333	26.66666
K	310660043009	0803	0.040803	0.028810	8.88888	8.88888	8.88888	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0804	0.093312	0.065886	0.00000	3.27868	9.83606	6.55737	6.55737	24.59016	16.39344	8.19672
					3.27868	3.27868	3.27868	3.27868	3.27868	8.19672	0.00000	0.00000
K	310660043009	0805	0.062208	0.043924	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	2.15053	2.15053	2.15053	5.01792	5.01792	5.01792
K	310660043009	0806	0.007358	0.005195	22.93906	22.93906	22.93906	8.60215	1.07526	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	5.37634
K	310660043009	0807	0.000000	0.000000	27.95698	20.43010	2.15053	3.22580	3.22580	6.45161	6.45161	6.45161
K	310660043009	0808	0.000000	0.000000	2.15053	3.22580	3.22580	3.22580	3.22580	3.22580	0.00000	0.00000
K	310660043009	0809	0.008027	0.005668	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	9.09090	9.09090	9.09090	0.00000	0.00000	45.45454	27.27272
K	310660043009	0810	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310660043009	0811	0.000000	0.000000								
K	310660043009	0812	0.000000	0.000000								
K	310660043009	0813	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310740048810	0714	0.000000	0.000000	0.00000	0.00000	25.00000	12.50000	12.50000	25.00000	25.00000	0.00000
K	310740048810	0715	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	310740048810	0716	0.000000	0.000000								
K	310740048810	0717	0.000000	0.000000								
K	310740048810	0718	0.000000	0.000000								
K	310740048810	0719	0.000000	0.000000								
K	310740048810	0720	0.000000	0.000000								
K	310740048810	0721	0.000000	0.000000								
K	310740048810	0722	0.000000	0.000000								
K	310740048810	0723	0.000000	0.000000								
K	310740048810	0724	0.000000	0.000000								
K	310740048810	0725	0.000000	0.000000								
K	310740048810	0726	0.000000	0.000000								
K	310740048810	0727	0.000000	0.000000								
K	310740048810	0728	0.000000	0.000000								
K	310740048810	0729	0.000000	0.000000								
K	310740048810	0730	0.000000	0.000000								
K	310740048810	0731	0.000000	0.000000								
K	310740048810	0801	0.000000	0.000000								
K	310740048810	0802	0.000000	0.000000								
K	310740048810	0803	0.000000	0.000000								
K	310740048810	0804	0.000000	0.000000								
K	310740048810	0805	0.000000	0.000000								
K	310740048810	0806	0.000000	0.000000								
K	310740048810	0807	0.000000	0.000000								
K	310740048810	0808	0.000000	0.000000								
K	310740048810	0809	0.000000	0.000000								

K	310740048810	0810	0.000000	0.000000
K	310740048810	0811	0.000000	0.000000
K	310740048810	0812	0.000000	0.000000
K	310740048810	0813	0.000000	0.000000
K	310740048811	0714	0.002165	0.002165
K	310740048811	0715	0.002165	0.002165
K	310740048811	0716	0.002165	0.002165
K	310740048811	0717	0.000000	0.000000
K	310740048811	0718	0.000000	0.000000
K	310740048811	0719	0.002165	0.002165
K	310740048811	0720	0.002165	0.002165
K	310740048811	0721	0.002165	0.002165
K	310740048811	0722	0.002165	0.002165
K	310740048811	0723	0.002165	0.002165
K	310740048811	0724	0.000000	0.000000
K	310740048811	0725	0.000000	0.000000
K	310740048811	0726	0.002165	0.002165
K	310740048811	0727	0.002165	0.002165
K	310740048811	0728	0.002165	0.002165
K	310740048811	0729	0.002165	0.002165
K	310740048811	0730	0.002165	0.002165
K	310740048811	0731	0.000000	0.000000
K	310740048811	0801	0.000000	0.000000
K	310740048811	0802	0.002165	0.002165
K	310740048811	0803	0.002165	0.002165
K	310740048811	0804	0.002165	0.002165
K	310740048811	0805	0.002165	0.002165
K	310740048811	0806	0.002165	0.002165
K	310740048811	0807	0.000000	0.000000
K	310740048811	0808	0.000000	0.000000
K	310740048811	0809	0.002165	0.002165
K	310740048811	0810	0.002165	0.002165
K	310740048811	0811	0.002165	0.002165
K	310740048811	0812	0.002165	0.002165
K	310740048811	0813	0.002165	0.002165
K	311760022405	0714	0.030061	0.030061
K	311760022405	0715	0.030061	0.030061
K	311760022405	0716	0.030061	0.030061
K	311760022405	0717	0.030061	0.030061
K	311760022405	0718	0.030061	0.030061
K	311760022405	0719	0.030061	0.030061
K	311760022405	0720	0.030061	0.030061
K	311760022405	0721	0.030061	0.030061
K	311760022405	0722	0.030061	0.030061
K	311760022405	0723	0.030061	0.030061
K	311760022405	0724	0.030061	0.030061
K	311760022405	0725	0.030061	0.030061
K	311760022405	0726	0.030061	0.030061
K	311760022405	0727	0.030061	0.030061
K	311760022405	0728	0.030061	0.030061
K	311760022405	0729	0.030061	0.030061
K	311760022405	0730	0.030061	0.030061
K	311760022405	0731	0.030061	0.030061
K	311760022405	0801	0.030061	0.030061
K	311760022405	0802	0.030061	0.030061
K	311760022405	0803	0.030061	0.030061
K	311760022405	0804	0.030061	0.030061
K	311760022405	0805	0.030061	0.030061
K	311760022405	0806	0.030061	0.030061
K	311760022405	0807	0.030061	0.030061
K	311760022405	0808	0.030061	0.030061

K	311760022405	0809	0.030061	0.030061
K	311760022405	0810	0.030061	0.030061
K	311760022405	0811	0.030061	0.030061
K	311760022405	0812	0.030061	0.030061
K	311760022405	0813	0.030061	0.030061

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	312980047001	0714	0.065500	0.107000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	312980047001	0715	0.243700	0.471300	0.00000	0.00000	22.82527	20.37174	17.91821	15.46468	12.93680	10.48327
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0716	0.271600	0.343500	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0717	0.282900	0.428900	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047001	0718	0.430500	0.592800	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047001	0719	0.284500	0.390200	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0720	0.162100	0.249800	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0721	0.154500	0.169400	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0722	0.161900	0.245900	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0723	0.191500	0.314000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0724	0.425300	0.526200	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047001	0725	0.389300	0.569600	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047001	0726	0.472100	0.698500	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0727	0.369500	0.465000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0728	0.343300	0.527000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0729	0.231400	0.361000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	312980047001	0730	0.000000	0.000000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
K	312980047001	0731	0.000000	0.000000	5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
K	312980047001	0801	0.001000	0.001000	5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047001	0802	0.364900	0.461200	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
K	312980047001	0803	0.261700	0.507400	5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	312980047001	0804	0.333000	0.555300	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0805	0.311600	0.398900	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
K	312980047001	0806	0.254500	0.408200	5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	312980047001	0807	0.378900	0.528800	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0808	0.372500	0.609800	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
K	312980047001	0809	0.284000	0.425000	5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	312980047001	0810	0.350800	0.566000	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047001	0811	0.380900	0.507900	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
K	312980047001	0812	0.394300	0.666100	5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	312980047001	0813	0.308400	0.341300	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					2.66600	1.85139	1.85139	1.85139	2.81411	3.75215	4.71488	5.67761
					6.61565	7.57837	7.57837	7.57837	7.57837	7.57837	7.57837	7.57837
K	312980047002	0714	0.070900	0.115900	7.57837	7.57837	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	22.82527	20.37174	17.91821	15.46468	12.93680	10.48327

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	312980047002	0715	0.241000	0.465800	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0716	0.176300	0.222900	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0717	0.024000	0.036300	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047002	0718	0.394300	0.543000	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047002	0719	0.416200	0.571500	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0720	0.442100	0.684000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0721	0.405400	0.446000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0722	0.358500	0.545900	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0723	0.000000	0.000000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0724	0.000000	0.000000	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047002	0725	0.000000	0.000000	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047002	0726	0.376800	0.557300	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0727	0.485500	0.611100	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0728	0.515900	0.792500	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0729	0.371000	0.579600	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0730	0.416300	0.506000	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	312980047002	0731	0.302300	0.593700	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
K	312980047002	0801	0.320700	0.696200	5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
					1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
K	312980047002	0802	0.446800	0.564900	5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047002	0803	0.368600	0.714800	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
K	312980047002	0804	0.449600	0.749800	5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	312980047002	0805	0.402500	0.515300	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0806	0.330600	0.530200	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
K	312980047002	0807	0.435000	0.606900	5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
K	312980047002	0808	0.396400	0.648900	5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
					5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
K	312980047002	0809	0.392500	0.587800	1.67856	0.96469	0.96469	0.96469	1.79432	2.62396	3.43430	4.26393
					5.09357	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321	5.92321
K	312980047002	0810	0.380700	0.614100	5.92321	5.92321	5.92321	5.20933	4.51475	3.80088	3.08701	2.37314
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	312980047002	0811	0.311500	0.415200	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	312980047002	0812	0.292900	0.494300	1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
					4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
K	312980047002	0813	0.247100	0.273400	5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
					1.98931	1.38146	1.38146	1.38146	2.09983	2.79977	3.51814	4.23650
K	314900009801	0714	0.099455	0.411628	4.93645	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481	5.65481
					5.65481	5.65481	5.65481	5.04696	4.43912	3.83127	3.20501	3.20501
K	314900009801	0715	0.093545	0.387173	2.66600	1.85139	1.85139	1.85139	2.81411	3.75215	4.71488	5.67761
					6.61565	7.57837	7.57837	7.57837	7.57837	7.57837	7.57837	7.57837
					7.57837	7.57837	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					5.12820	5.19074	2.37648	1.18824	1.12570	1.12570	1.31332	4.12757
					4.75297	4.81550	4.81550	4.81550	4.94058	4.94058	4.87804	4.87804
					4.81550	4.81550	4.87804	4.87804	4.94058	5.25328	5.00312	5.00312
					4.98670	2.12765	1.26329	1.32978	1.32978	1.32978	1.46276	3.85638
					5.31914	5.18617	5.05319	4.92021	5.18617	5.18617	4.98670	5.18617
					4.98670	5.11968	5.11968	4.98670	5.25265	5.45212	5.25265	5.11968

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	314900009801	0716	0.090753	0.375589	4.45510 2.19328	2.26182 4.45510	2.60452 5.55174	1.30226 5.62028	1.30226 5.55174	1.30226 5.62028	1.30226 5.48320	1.37080 5.48320
K	314900009801	0717	0.093481	0.386915	5.62028 5.18962	5.48320 4.19161	5.55174 4.12508	5.34612 2.39520	5.48320 1.19760	5.68882 1.13107	5.41466 1.13107	5.55174 1.59680
K	314900009801	0718	0.093857	0.388460	3.92548 4.79041	5.45575 4.79041	5.38922 4.92348	5.45575 4.79041	5.25615 4.92348	4.92348 4.79041	4.85695 4.79041	4.72388 5.25615
K	314900009801	0719	0.098701	0.409932	5.50033 2.78330	5.50033 4.90390	4.30748 5.23525	3.44599 5.10271	1.32538 4.97017	1.12657 4.97017	1.06030 4.70510	1.12657 4.77137
K	314900009801	0720	0.079364	0.329297	5.03644 5.13959	5.16898 4.06091	4.77137 3.10913	4.70510 2.03045	4.77137 1.07868	4.70510 1.07868	4.90390 1.33248	5.10271 4.06091
K	314900009801	0721	0.074792	0.310311	5.07614 4.82233	5.07614 4.75888	5.01269 4.82233	4.88578 4.75888	4.82233 4.88578	4.69543 5.07614	4.69543 4.69543	4.82233 5.20304
K	314900009801	0722	0.082442	0.342045	4.81832 5.92417	1.65876 6.24012	1.26382 5.92417	1.26382 5.84518	1.42180 5.84518	1.34281 6.16113	1.42180 6.31911	3.23854 6.08214
K	314900009801	0723	0.085013	0.352707	6.08214 1.42497	5.29225 1.50880	4.66034 1.50880	4.58135 1.42497	4.73933 1.50880	4.97630 1.42497	3.55450 1.59262	1.34281 1.50880
K	314900009801	0724	0.065519	0.271816	2.51466 6.87342	4.10729 6.11902	6.45431 6.03520	6.78960 5.11316	6.78960 5.44844	6.87342 6.28667	6.78960 3.68818	6.87342 1.34115
K	314900009801	0725	0.070403	0.292102	1.29277 3.49809	1.29277 6.00760	1.21673 5.85551	1.36882 5.70342	1.29277 5.85551	1.29277 6.15969	1.29277 6.08365	1.29277 6.00760
K	314900009801	0726	0.105052	0.443848	6.15969 1.40117	5.77946 1.25368	5.70342 1.17994	5.01901 1.25368	5.62737 1.17994	6.08365 1.25368	5.77946 1.25368	4.33460 3.46607
K	314900009801	0727	0.107532	0.454318	5.45722 5.53097	5.82595 5.38348	5.45722 5.67846	5.82595 5.53097	5.67846 5.53097	5.53097 5.75221	5.82595 5.75221	5.53097 3.46607
K	314900009801	0728	0.104247	0.440463	1.62679 1.72248	1.72248 1.81618	1.62679 5.74162	1.62679 7.84688	1.62679 7.94258	1.62679 7.75119	1.53110 1.53110	1.62679 5.07177
K	314900009801	0729	0.098636	0.416748	6.02870 1.60284	6.88995 1.51380	7.55980 1.51380	5.93301 1.51380	5.93301 1.51380	7.46411 1.60284	5.64593 1.69189	2.10526 1.51380
K	314900009801	0730	0.091026	0.384571	1.51380 7.47996	1.42475 7.39091	1.51380 7.39091	3.11665 7.12377	5.69902 7.21282	4.98664 7.47996	4.09617 7.39091	6.41139 7.30186
K	314900009801	0731	0.063429	0.267966	3.75318 5.15267	2.29007 5.08905	1.08142 5.08905	1.20865 5.47073	1.08142 5.47073	1.14503 5.34351	1.14503 5.34351	3.30788 5.34351
					5.34351 5.09633	5.34351 3.79117	5.34351 1.74021	5.40712 1.05655	5.27989 1.05655	5.27989 1.05655	5.40712 1.24300	5.27989 4.22622
					5.22063 5.03418	5.28278 4.59912	5.22063 4.84773	5.22063 5.09633	5.22063 4.84773	5.15848 4.66128	5.09633 5.03418	5.22063 4.97203
					5.06410 5.12820	4.35897 4.80769	1.41025 4.93589	1.08974 5.25641	1.08974 5.32051	1.08974 5.00000	1.92307 4.87179	4.67948 4.80769
					4.80769 3.99728	4.87179 1.42276	5.00000 1.15176	5.12820 1.08401	5.06410 1.28726	4.87179 1.15176	4.80769 1.21951	4.61538 2.64227
					5.08130 5.69105	5.14905 5.69105	5.35230 5.21680	5.42005 5.28455	5.69105 5.48780	5.75880 5.35230	5.69105 5.08130	5.82655 4.26829
					2.86343 5.65345	1.24816 5.50660	1.17474 5.50660	1.32158 5.65345	1.17474 6.16740	1.24816 6.09397	1.32158 6.16740	3.37738 6.09397
					6.16740 1.79135	5.87371 2.00210	5.87371 1.89673	5.80029 1.89673	5.87371 1.89673	5.28634 1.89673	3.01027 1.89673	1.54185 1.89673
					2.00210 7.37618	2.84510 6.74394	4.32033 6.53319	4.32033 5.47945	4.42571 2.63435	4.32033 7.16543	4.95258 7.58693	7.27081 6.84931

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	314900009801	0801	0.061013	0.257785	2.95728	1.86199	1.86199	1.86199	1.97152	1.86199	1.86199	1.86199
					2.08105	2.08105	1.97152	1.97152	1.97152	2.08105	6.24315	8.76232
K	314900009801	0802	0.081403	0.335180	9.20043	8.65279	6.35268	4.70974	6.24315	9.09090	8.87185	3.61445
					1.34629	1.34629	1.27150	1.27150	1.27150	1.34629	1.27150	1.57068
K	314900009801	0803	0.009922	0.040862	4.71204	5.90875	6.05833	5.75916	5.90875	5.68436	5.53477	5.68436
					5.68436	5.53477	5.68436	5.90875	5.75916	5.83395	5.08601	4.56245
K	314900009801	0804	0.000000	0.000000	13.49693	10.42944	10.42944	11.04294	9.81595	11.04294	10.42944	12.26993
K	314900009801	0805	0.080481	0.331421	11.04294	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	314900009801	0806	0.080792	0.332674	0.00000	0.22692	1.21028	1.28593	1.36157	1.21028	1.28593	2.79878
					4.91679	5.06807	4.76550	5.74886	5.74886	5.67322	6.05143	5.67322
K	314900009801	0807	0.050286	0.207075	6.20272	5.74886	5.90015	6.20272	5.97579	6.20272	5.74886	4.99243
					4.59683	4.59683	2.86360	1.28108	1.28108	1.13036	1.20572	2.03466
K	314900009801	0808	0.053026	0.218355	4.89826	5.87792	6.17935	6.02863	5.65184	5.72720	5.65184	5.80256
					6.10399	6.02863	3.76789	3.99397	5.50113	5.95327	2.56217	1.28108
K	314900009801	0809	0.085857	0.347828	1.93704	1.93704	1.93704	1.93704	1.81598	1.93704	1.93704	1.93704
					2.05811	2.05811	3.26876	7.50605	7.86924	7.74818	7.62711	7.74818
K	314900009801	0810	0.096584	0.391248	7.62711	7.62711	5.44794	3.75302	3.99515	6.29539	2.05811	1.93704
					1.72215	2.06659	2.06659	2.18140	2.18140	2.06659	2.06659	2.06659
K	314900009801	0811	0.081026	0.328242	2.18140	2.06659	1.95177	2.06659	2.06659	4.47761	5.05166	6.77382
					7.46268	8.95522	9.29965	6.77382	6.19977	7.34787	7.23306	3.67393
K	314900009801	0812	0.058779	0.238100	1.15332	1.15332	1.15332	1.08548	1.15332	1.15332	1.22116	1.89959
					4.47761	5.56309	5.69877	5.76662	5.69877	5.76662	5.76662	5.69877
K	314900009801	0813	0.066519	0.269485	5.83446	5.63093	5.69877	5.69877	5.69877	5.69877	5.69877	5.63093
					4.58383	4.64414	3.79975	2.89505	1.08564	1.02533	2.41254	4.22195
K	314900009802	0714	0.000000	0.000000	4.76477	4.82509	4.82509	5.00603	4.64414	4.52352	4.70446	4.58383
K	314900009802	0715	0.000000	0.000000	4.52352	4.64414	4.64414	4.76477	4.94571	4.64414	4.70446	4.58383
K	314900009802	0716	0.000000	0.000000	4.81667	1.72537	1.22214	1.22214	1.29403	1.29403	2.87562	4.02588
K	314900009802	0717	0.000000	0.000000	5.89503	6.03082	5.96693	5.75125	5.89503	5.67936	5.53558	5.96693
K	314900009802	0718	0.000000	0.000000	5.60747	5.46369	4.74478	4.31344	5.60747	5.39180	2.44428	1.22214
K	314900009802	0719	0.384000	0.156423	1.78394	1.88305	1.88305	1.88305	1.78394	1.88305	1.88305	1.88305
					3.07234	6.83845	7.53221	6.83845	6.73934	8.02775	7.92864	6.44202
K	314900009802	0720	0.162364	0.066142	2.67591	5.45094	5.15361	2.18037	6.54112	6.04558	1.98216	1.68483
					1.48861	1.48861	1.57618	1.57618	1.48861	1.57618	1.57618	1.57618
K	314900009802	0721	0.000000	0.000000	3.32749	7.00525	7.18038	7.35551	6.91768	6.91768	6.56742	6.56742
K	314900009802	0722	0.000000	0.000000	7.35551	6.12959	5.42907	3.76532	4.81611	5.34150	1.57618	1.40105
K	314900009802	0723	0.000000	0.000000								
					0.00000	0.00000	0.00000	0.85714	3.14285	3.42857	3.71428	4.00000
					6.00000	5.14285	5.42857	5.71428	5.42857	5.71428	6.28571	5.71428
					6.00000	5.71428	5.42857	5.71428	5.71428	6.00000	2.57142	2.28571
					6.08108	6.08108	6.08108	6.08108	6.08108	6.08108	6.08108	6.08108
					6.08108	6.08108	6.08108	5.40540	6.08108	6.75675	6.08108	6.75675
					2.02702	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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K  314900009802  0728  0.000000  0.000000
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K  314900009802  0730  0.000000  0.000000
K  314900009802  0731  0.000000  0.000000
K  314900009802  0801  0.000000  0.000000
K  314900009802  0802  0.000000  0.000000
K  314900009802  0803  0.000000  0.000000
K  314900009802  0804  0.000000  0.000000
K  314900009802  0805  0.000000  0.000000
K  314900009802  0806  0.000000  0.000000
K  314900009802  0807  0.000000  0.000000
K  314900009802  0808  0.000000  0.000000
K  314900009802  0809  0.000000  0.000000
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K  314900009802  0813  0.000000  0.000000
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K  314900009803  0812  0.000000  0.000000
K  314900009803  0813  0.000000  0.000000
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DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	314900009804	0714	0.499947	0.207644	0.00000	0.00000	0.00000	1.00840	2.18487	1.84873	2.35294	2.52100
					4.03361	5.21008	5.21008	5.54621	7.05882	7.56302	7.89915	8.23529
K	314900009804	0715	0.635211	0.263828	8.23529	7.89915	7.89915	3.52941	2.85714	3.02521	3.19327	2.68907
					2.11640	2.11640	2.24867	2.24867	2.11640	2.51322	2.38095	2.51322
K	314900009804	0716	0.659596	0.273950	4.49735	6.48148	6.48148	6.48148	6.61375	6.48148	6.34920	6.34920
					6.34920	5.42328	4.23280	3.96825	2.91005	3.57142	3.17460	2.38095
K	314900009804	0717	0.001684	0.000698	2.29299	2.16560	2.03821	2.03821	2.16560	2.29299	2.16560	2.67515
K	314900009804	0718	0.000000	0.000000	4.58598	4.84076	6.24203	6.11464	6.36942	6.49681	6.24203	6.24203
K	314900009804	0719	0.680912	0.283502	6.24203	6.36942	6.11464	5.09554	3.69426	3.56687	2.16560	1.78343
					0.00000	0.00000	0.00000	1.11940	1.61691	1.74129	1.99004	3.10945
					5.97014	6.09452	5.97014	5.97014	6.09452	6.09452	6.09452	5.97014
K	314900009804	0720	0.395509	0.164672	5.84577	5.84577	6.21890	6.09452	5.84577	6.09452	4.10447	2.11442
					3.85438	3.85438	4.06852	3.85438	4.28265	3.85438	3.85438	3.85438
K	314900009804	0721	0.180404	0.075109	3.85438	4.49678	7.70877	8.77944	4.28265	3.85438	3.85438	3.42612
					3.64025	3.64025	3.42612	3.21199	3.21199	3.64025	3.85438	3.85438
K	314900009804	0722	0.000000	0.000000	8.07174	8.07174	8.07174	7.62331	8.07174	8.96860	8.52017	8.52017
K	314900009804	0723	0.000000	0.000000	8.07174	7.62331	9.41704	4.48430	0.00000	0.00000	0.00000	0.00000
K	314900009804	0724	0.000000	0.000000	0.00000	0.00000	0.00000	4.48430	0.00000	0.00000	0.00000	0.00000
K	314900009804	0725	0.000000	0.000000								
K	314900009804	0726	0.000000	0.000000								
K	314900009804	0727	0.519070	0.220082	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.52173	2.26086	3.65217	7.65217	8.86956	8.69565	9.04347
K	314900009804	0728	0.762912	0.323463	8.69565	8.86956	8.69565	8.86956	8.69565	8.86956	3.65217	2.95652
					2.01183	1.89349	2.13017	1.65680	2.01183	2.01183	2.01183	2.01183
K	314900009804	0729	0.400789	0.169928	2.48520	4.61538	5.08875	5.91715	5.91715	6.03550	6.03550	6.03550
					6.03550	6.03550	5.91715	6.15384	6.03550	6.03550	3.66863	2.24852
K	314900009804	0730	0.000000	0.000000	4.05405	3.15315	3.37837	3.37837	3.60360	3.82882	3.15315	3.37837
K	314900009804	0731	0.000000	0.000000	3.82882	6.53153	6.30630	5.63063	4.50450	4.50450	4.50450	4.50450
K	314900009804	0801	0.000000	0.000000	4.27927	4.27927	4.50450	4.05405	4.72972	4.27927	4.27927	1.35135
K	314900009804	0802	0.000000	0.000000								
K	314900009804	0803	0.000000	0.000000								
K	314900009804	0804	0.000000	0.000000								
K	314900009804	0805	0.000000	0.000000								
K	314900009804	0806	0.000000	0.000000								
K	314900009804	0807	0.000000	0.000000								
K	314900009804	0808	0.000000	0.000000								
K	314900009804	0809	0.000000	0.000000								
K	314900009804	0810	0.000000	0.000000								
K	314900009804	0811	0.000000	0.000000								
K	314900009804	0812	0.000000	0.000000								
K	314900009804	0813	0.000000	0.000000								
K	314900009805	0714	0.000000	0.000000								
K	314900009805	0715	0.000000	0.000000								

K	3149000098005	0716	0.000000	0.000000
K	3149000098005	0717	0.000000	0.000000
K	3149000098005	0718	0.000000	0.000000
K	3149000098005	0719	0.000000	0.000000
K	3149000098005	0720	0.000000	0.000000
K	3149000098005	0721	0.000000	0.000000
K	3149000098005	0722	0.000000	0.000000
K	3149000098005	0723	0.000000	0.000000
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K	3149000098005	0731	0.000000	0.000000
K	3149000098005	0801	0.000000	0.000000
K	3149000098005	0802	0.000000	0.000000
K	3149000098005	0803	0.000000	0.000000
K	3149000098005	0804	0.000000	0.000000
K	3149000098005	0805	0.000000	0.000000
K	3149000098005	0806	0.000000	0.000000
K	3149000098005	0807	0.000000	0.000000
K	3149000098005	0808	0.000000	0.000000
K	3149000098005	0809	0.000000	0.000000
K	3149000098005	0810	0.000000	0.000000
K	3149000098005	0811	0.000000	0.000000
K	3149000098005	0812	0.000000	0.000000
K	3149000098005	0813	0.000000	0.000000
K	3149000098006	0714	0.015855	0.012727
K	3149000098006	0715	0.015163	0.012172
K	3149000098006	0716	0.015080	0.012104
K	3149000098006	0717	0.014734	0.011825
K	3149000098006	0718	0.000000	0.000000
K	3149000098006	0719	0.033176	0.026696
K	3149000098006	0720	0.030657	0.024668
K	3149000098006	0721	0.011723	0.009434
K	3149000098006	0722	0.015457	0.012438
K	3149000098006	0723	0.014505	0.011671
K	3149000098006	0724	0.000000	0.000000
K	3149000098006	0725	0.000000	0.000000
K	3149000098006	0726	0.000000	0.000000
K	3149000098006	0727	0.000000	0.000000
K	3149000098006	0728	0.000000	0.000000
K	3149000098006	0729	0.000000	0.000000
K	3149000098006	0730	0.000000	0.000000
K	3149000098006	0731	0.000000	0.000000
K	3149000098006	0801	0.000000	0.000000
K	3149000098006	0802	0.000000	0.000000
K	3149000098006	0803	0.000000	0.000000
K	3149000098006	0804	0.000000	0.000000
K	3149000098006	0805	0.000000	0.000000
K	3149000098006	0806	0.000000	0.000000
K	3149000098006	0807	0.000000	0.000000
K	3149000098006	0808	0.000000	0.000000
K	3149000098006	0809	0.000000	0.000000
K	3149000098006	0810	0.000000	0.000000
K	3149000098006	0811	0.020979	0.016484
K	3149000098006	0812	0.000000	0.000000
K	3149000098006	0813	0.000000	0.000000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	314900009807	0714	7.208170	0.130077	4.76190	4.82456	4.38596	2.19298	1.12781	1.12781	1.50375	3.69674
					4.76190	4.82456	4.82456	4.82456	4.82456	4.82456	4.69924	4.63659
K	314900009807	0715	0.000000	0.000000	4.82456	4.69924	4.76190	4.82456	4.76190	4.76190	4.76190	4.76190
					5.01302	4.75260	2.34375	1.36718	1.17187	1.23697	1.36718	3.58072
K	314900009807	0716	7.569440	0.100529	4.68281	5.01302	4.94791	5.01302	4.94791	4.68281	4.94791	4.81770
					5.07812	4.94791	4.94791	4.68281	5.01302	4.94791	4.94791	4.94791
K	314900009807	0717	7.813940	0.047963	4.53460	4.47494	4.53460	4.53460	4.05727	1.61097	1.19331	3.28162
					4.47494	4.53460	4.53460	4.47494	4.53460	4.47494	4.47494	4.41527
K	314900009807	0718	0.000000	0.000000	4.47494	4.53460	4.41527	4.47494	4.47494	4.53460	4.47494	4.47494
					4.24983	2.44687	2.31809	2.18931	1.67417	2.51126	2.96200	3.54153
K	314900009807	0719	8.383520	0.144166	4.89375	4.89375	4.89375	4.82936	4.82936	4.89375	4.89375	4.95814
					4.89375	4.95814	4.95814	4.82936	4.89375	4.95814	4.89375	4.63618
K	314900009807	0720	8.333380	0.275728	2.71523	2.38410	2.45033	2.45033	2.45033	2.45033	2.84768	2.51655
					4.50331	5.03311	5.09933	5.03311	4.96688	5.03311	4.96688	5.03311
K	314900009807	0721	6.443940	0.164882	5.03311	4.96688	4.90066	5.03311	5.03311	5.03311	5.03311	5.03311
					4.19161	4.08274	4.13718	4.19161	4.30048	4.13718	4.08274	4.13718
K	314900009807	0722	6.366340	0.163921	4.13718	4.19161	4.30048	4.19161	4.13718	4.19161	4.13718	4.19161
					4.13718	4.19161	4.08274	4.13718	4.13718	4.19161	4.19161	4.19161
K	314900009807	0723	6.325350	0.043402	4.16210	4.21686	4.21686	4.16210	4.21686	4.16210	4.21686	4.16210
					4.16210	4.05257	4.16210	4.16210	4.16210	4.16210	4.16210	4.05257
K	314900009807	0724	0.000000	0.000000	4.16210	4.21686	4.21686	4.16210	4.16210	4.16210	4.16210	4.16210
					4.95750	3.18696	1.41643	1.41643	1.41643	1.48725	1.41643	1.69971
K	314900009807	0725	0.000000	0.000000	3.47025	5.16997	5.38243	5.31161	5.38243	5.31161	5.38243	5.31161
					5.31161	5.31161	5.31161	5.31161	5.24079	5.24079	5.38243	5.16997
K	314900009807	0726	7.032680	0.229053	3.08243	1.72043	1.64874	1.57706	1.64874	1.72043	1.72043	1.93548
					3.79928	5.37634	5.44802	5.37634	5.37634	5.37634	5.44802	5.44802
K	314900009807	0727	8.091410	0.311850	5.37634	5.44802	5.37634	5.37634	5.44802	5.44802	5.51971	5.30465
					3.53535	1.94805	1.37085	1.29870	1.37085	1.29870	1.29870	2.66955
K	314900009807	0728	8.036760	0.333210	4.90620	5.55555	5.55555	5.48340	5.55555	5.55555	5.48340	5.55555
					5.48340	5.55555	5.55555	5.48340	5.55555	5.55555	5.41125	2.95815
K	314900009807	0729	7.119440	0.278203	91.66666	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					10.71932	10.71932	10.86036	10.71932	10.57827	10.43723	10.43723	10.43723
					4.80207	3.63400	1.23296	1.16807	2.59571	1.62232	1.68721	4.08825
					4.93186	4.93186	4.93186	4.93186	4.93186	4.99675	4.93186	4.93186
					4.99675	4.86696	4.99675	4.99675	4.93186	4.99675	4.93186	4.93186
					4.34292	4.23011	4.34292	4.28652	4.06091	2.65087	2.98928	4.23011
					4.34292	4.23011	4.34292	4.34292	4.28652	4.28652	4.28652	4.34292
					4.23011	4.34292	4.28652	4.28652	4.34292	4.34292	4.23011	4.34292
					4.31572	4.31572	3.74787	3.74787	3.97501	2.61215	3.35036	4.25894
					4.42930	4.37251	4.31572	4.37251	4.31572	4.37251	4.42930	4.31572
					4.37251	4.37251	4.31572	4.37251	4.25894	4.37251	4.37251	4.31572
					4.93589	3.52564	1.66666	1.53846	1.60256	1.53846	2.05128	4.29487
					5.00000	4.93589	4.93589	4.93589	4.93589	4.80769	5.00000	4.93589
					4.87179	4.93589	4.93589	4.87179	4.93589	4.93589	4.93589	4.93589

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	314900009807	0730	6.863800	0.278981	5.05319	2.92553	1.59574	1.72872	1.59574	1.66223	1.66223	3.92287
					4.92021	4.92021	4.98670	5.05319	5.05319	5.05319	4.98670	5.05319
K	314900009807	0731	6.498730	0.259380	5.05319	5.05319	5.05319	5.11968	5.05319	5.05319	5.05319	4.38829
					4.14325	4.14325	2.80898	1.75561	1.75561	1.82584	1.75561	1.75561
K	314900009807	0801	5.284930	0.221696	1.82584	3.93258	5.26685	5.26685	5.33707	5.33707	5.26685	5.33707
					5.33707	5.26685	5.33707	5.33707	5.26685	5.33707	5.33707	5.26685
K	314900009807	0802	5.996900	0.232451	4.33386	2.00642	1.92616	2.00642	1.92616	2.00642	1.92616	2.08667
					1.92616	2.08667	1.92616	2.88924	5.61797	6.01926	6.09951	6.09951
K	314900009807	0803	6.475490	0.262936	6.17977	6.09951	6.09951	6.17977	6.09951	6.17977	6.17977	6.09951
					3.24858	1.69491	1.83615	1.69491	1.76553	1.69491	1.76553	1.97740
K	314900009807	0804	6.386480	0.265022	4.30790	5.22598	5.36723	5.36723	5.36723	5.29661	5.29661	5.29661
					5.36723	5.36723	5.29661	5.36723	5.29661	5.43785	5.29661	5.36723
K	314900009807	0805	6.335630	0.232162	4.97056	3.66252	1.70045	1.56965	1.63505	1.56965	1.63505	3.20470
					4.90516	5.03597	5.03597	4.97056	5.03597	4.97056	4.97056	4.97056
K	314900009807	0806	6.915920	0.297934	5.03597	4.97056	5.03597	4.97056	5.03597	5.03597	5.03597	5.03597
					5.10610	4.04509	1.72413	1.59151	1.65782	1.65782	1.65782	2.32095
K	314900009807	0807	5.429300	0.207607	4.84084	4.97347	5.03978	5.03978	4.97347	5.03978	5.03978	5.03978
					5.03978	5.03978	4.97347	4.97347	5.03978	5.03978	5.10610	5.03978
K	314900009807	0808	5.145630	0.187275	4.01069	2.60695	1.67112	1.67112	1.67112	1.67112	1.67112	3.60962
					5.01336	5.14705	5.08021	5.14705	5.08021	5.08021	5.14705	5.08021
K	314900009807	0809	7.285490	0.202143	5.14705	5.01336	5.14705	5.01336	5.08021	5.08021	5.08021	5.08021
					4.65401	4.65401	4.65401	3.30679	2.69442	1.53092	1.59216	3.30679
K	314900009807	0810	8.826480	0.380418	4.59277	4.71524	4.71524	4.71524	4.71524	4.71524	4.77648	4.71524
					4.71524	4.59277	4.65401	4.71524	4.71524	4.71524	4.71524	3.12308
K	314900009807	0811	7.901830	0.348501	1.95007	1.87207	1.95007	1.95007	1.87207	1.95007	1.87207	1.95007
					1.87207	2.02808	3.58814	5.61622	5.92823	6.00624	5.92823	5.92823
K	314900009807	0812	6.919580	0.275113	5.92823	5.92823	6.00624	6.00624	5.92823	6.00624	6.00624	5.92823
					2.88065	2.05761	2.05761	2.05761	2.05761	2.13991	2.05761	2.13991
K	314900009807	0813	6.649860	0.255440	2.05761	2.13991	2.13991	2.88065	5.51440	6.25514	6.33744	6.25514
					6.33744	6.25514	6.25514	6.33744	6.25514	6.33744	6.33744	4.85596
					3.89953	3.63516	1.78453	1.65234	1.71844	1.58625	1.78453	3.50297
					5.02313	5.15532	5.02313	5.00922	5.02313	5.08922	5.08922	5.02313
					5.02313	5.02313	5.02313	4.95703	5.08922	4.82485	5.02313	4.95703
					4.20076	4.14620	4.20076	4.20076	4.20076	4.20076	4.20076	4.14620
					4.20076	4.14620	4.20076	4.14620	4.09165	4.14620	4.14620	4.20076
					4.14620	4.14620	4.14620	4.20076	4.09165	4.20076	4.14620	4.14620
					4.57038	4.63132	3.83912	2.13284	1.52346	2.25472	4.32663	4.69226
					4.63132	4.69226	4.69226	4.63132	4.63132	4.63132	4.69226	4.69226
					4.69226	4.63132	4.63132	4.63132	4.69226	4.63132	4.50944	2.31566
					1.73973	1.80932	1.80932	1.80932	1.80932	1.80932	1.87891	2.99234
					4.94084	5.28879	5.35838	5.28879	5.35838	5.35838	5.28879	5.28879
					5.35838	5.28879	5.28879	5.28879	5.28879	5.28879	5.28879	5.08002
					2.17233	1.88269	1.73787	1.81028	1.81028	1.88269	1.81028	2.60680
					5.14120	5.43084	5.43084	5.35843	5.50325	5.43084	5.50325	5.50325
					5.57566	5.57566	5.57566	5.57566	5.57566	5.50325	5.21361	2.38957
K	314900009808	0714	0.021915	0.207718								
K	314900009808	0715	0.024034	0.227805								
K	314900009808	0716	0.023879	0.226335								
K	314900009808	0717	0.024169	0.229274								
K	314900009808	0718	0.025223	0.239072								
K	314900009808	0719	0.025614	0.237078								

K	3149000098 08	0720	0.026393	0.235114
K	3149000098 08	0721	0.024189	0.215481
K	3149000098 08	0722	0.024740	0.220390
K	3149000098 08	0723	0.024906	0.221862
K	3149000098 08	0724	0.026448	0.235605
K	3149000098 08	0725	0.027771	0.247386
K	3149000098 08	0726	0.021519	0.256145
K	3149000098 08	0727	0.000000	0.000000
K	3149000098 08	0728	0.000000	0.000000
K	3149000098 08	0729	0.012423	0.147878
K	3149000098 08	0730	0.022495	0.267765
K	3149000098 08	0731	0.012468	0.148406
K	3149000098 08	0801	0.000000	0.000000
K	3149000098 08	0802	0.000000	0.000000
K	3149000098 08	0803	0.000000	0.000000
K	3149000098 08	0804	0.008260	0.085694
K	3149000098 08	0805	0.014033	0.145582
K	3149000098 08	0806	0.020087	0.208392
K	3149000098 08	0807	0.019664	0.204010
K	3149000098 08	0808	0.018820	0.195245
K	3149000098 08	0809	0.015931	0.177692
K	3149000098 08	0810	0.018743	0.209050
K	3149000098 08	0811	0.015931	0.177692
K	3149000098 08	0812	0.017904	0.199698
K	3149000098 08	0813	0.017707	0.197498
K	3912000020 01	0714	0.108700	0.108700
K	3912000020 01	0715	0.108700	0.108700
K	3912000020 01	0716	0.108700	0.108700
K	3912000020 01	0717	0.108700	0.108700
K	3912000020 01	0718	0.108700	0.108700
K	3912000020 01	0719	0.108700	0.108700
K	3912000020 01	0720	0.108700	0.108700
K	3912000020 01	0721	0.108700	0.108700
K	3912000020 01	0722	0.108700	0.108700
K	3912000020 01	0723	0.108700	0.108700
K	3912000020 01	0724	0.108700	0.108700
K	3912000020 01	0725	0.108700	0.108700
K	3912000020 01	0726	0.108700	0.108700
K	3912000020 01	0727	0.108700	0.108700
K	3912000020 01	0728	0.108700	0.108700
K	3912000020 01	0729	0.108700	0.108700
K	3912000020 01	0730	0.108700	0.108700
K	3912000020 01	0731	0.108700	0.108700
K	3912000020 01	0801	0.108700	0.108700
K	3912000020 01	0802	0.108700	0.108700
K	3912000020 01	0803	0.108700	0.108700
K	3912000020 01	0804	0.108700	0.108700
K	3912000020 01	0805	0.108700	0.108700
K	3912000020 01	0806	0.108700	0.108700
K	3912000020 01	0807	0.108700	0.108700
K	3912000020 01	0808	0.108700	0.108700
K	3912000020 01	0809	0.108700	0.108700
K	3912000020 01	0810	0.108700	0.108700
K	3912000020 01	0811	0.108700	0.108700
K	3912000020 01	0812	0.108700	0.108700
K	3912000020 01	0813	0.108700	0.108700
K	3912000020 02	0714	0.108700	0.108700
K	3912000020 02	0715	0.108700	0.108700
K	3912000020 02	0716	0.108700	0.108700
K	3912000020 02	0717	0.108700	0.108700
K	3912000020 02	0718	0.108700	0.108700

K	391200002002	0719	0.108700	0.108700
K	391200002002	0720	0.108700	0.108700
K	391200002002	0721	0.108700	0.108700
K	391200002002	0722	0.108700	0.108700
K	391200002002	0723	0.108700	0.108700
K	391200002002	0724	0.108700	0.108700
K	391200002002	0725	0.108700	0.108700
K	391200002002	0726	0.108700	0.108700
K	391200002002	0727	0.108700	0.108700
K	391200002002	0728	0.108700	0.108700
K	391200002002	0729	0.108700	0.108700
K	391200002002	0730	0.108700	0.108700
K	391200002002	0731	0.108700	0.108700
K	391200002002	0801	0.108700	0.108700
K	391200002002	0802	0.108700	0.108700
K	391200002002	0803	0.108700	0.108700
K	391200002002	0804	0.108700	0.108700
K	391200002002	0805	0.108700	0.108700
K	391200002002	0806	0.108700	0.108700
K	391200002002	0807	0.108700	0.108700
K	391200002002	0808	0.108700	0.108700
K	391200002002	0809	0.108700	0.108700
K	391200002002	0810	0.108700	0.108700
K	391200002002	0811	0.108700	0.108700
K	391200002002	0812	0.108700	0.108700
K	391200002002	0813	0.108700	0.108700
K	391200002003	0714	0.108700	0.108700
K	391200002003	0715	0.108700	0.108700
K	391200002003	0716	0.108700	0.108700
K	391200002003	0717	0.108700	0.108700
K	391200002003	0718	0.108700	0.108700
K	391200002003	0719	0.108700	0.108700
K	391200002003	0720	0.108700	0.108700
K	391200002003	0721	0.108700	0.108700
K	391200002003	0722	0.108700	0.108700
K	391200002003	0723	0.108700	0.108700
K	391200002003	0724	0.108700	0.108700
K	391200002003	0725	0.108700	0.108700
K	391200002003	0726	0.108700	0.108700
K	391200002003	0727	0.108700	0.108700
K	391200002003	0728	0.108700	0.108700
K	391200002003	0729	0.108700	0.108700
K	391200002003	0730	0.108700	0.108700
K	391200002003	0731	0.108700	0.108700
K	391200002003	0801	0.108700	0.108700
K	391200002003	0802	0.108700	0.108700
K	391200002003	0803	0.108700	0.108700
K	391200002003	0804	0.108700	0.108700
K	391200002003	0805	0.108700	0.108700
K	391200002003	0806	0.108700	0.108700
K	391200002003	0807	0.108700	0.108700
K	391200002003	0808	0.108700	0.108700
K	391200002003	0809	0.108700	0.108700
K	391200002003	0810	0.108700	0.108700
K	391200002003	0811	0.108700	0.108700
K	391200002003	0812	0.108700	0.108700
K	391200002003	0813	0.108700	0.108700
K	391200002004	0714	0.108700	0.108700
K	391200002004	0715	0.108700	0.108700
K	391200002004	0716	0.108700	0.108700
K	391200002004	0717	0.108700	0.108700

K	391200002004	0718	0.108700	0.108700
K	391200002004	0719	0.108700	0.108700
K	391200002004	0720	0.108700	0.108700
K	391200002004	0721	0.108700	0.108700
K	391200002004	0722	0.108700	0.108700
K	391200002004	0723	0.108700	0.108700
K	391200002004	0724	0.108700	0.108700
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K  391200002059  0715  0.135875  0.135875
K  391200002059  0716  0.135875  0.135875
K  391200002059  0717  0.135875  0.135875
K  391200002059  0718  0.135875  0.135875
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K  391200002059  0721  0.135875  0.135875
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K  391200002059  0723  0.135875  0.135875
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K  391200002059  0727  0.135875  0.135875
K  391200002059  0728  0.135875  0.135875
K  391200002059  0729  0.135875  0.135875
K  391200002059  0730  0.135875  0.135875
K  391200002059  0731  0.135875  0.135875
K  391200002059  0801  0.135875  0.135875
K  391200002059  0802  0.135875  0.135875
K  391200002059  0803  0.135875  0.135875
K  391200002059  0804  0.135875  0.135875
K  391200002059  0805  0.135875  0.135875
K  391200002059  0806  0.135875  0.135875
K  391200002059  0807  0.135875  0.135875
K  391200002059  0808  0.135875  0.135875
K  391200002059  0809  0.135875  0.135875
K  391200002059  0810  0.135875  0.135875
K  391200002059  0811  0.135875  0.135875
K  391200002059  0812  0.135875  0.135875
K  391200002059  0813  0.135875  0.135875
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K  391200002060  0715  0.108700  0.108700
K  391200002060  0716  0.108700  0.108700
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K  391200002060  0718  0.108700  0.108700
K  391200002060  0719  0.108700  0.108700
K  391200002060  0720  0.108700  0.108700
K  391200002060  0721  0.108700  0.108700
K  391200002060  0722  0.108700  0.108700
K  391200002060  0723  0.108700  0.108700
K  391200002060  0724  0.108700  0.108700
K  391200002060  0725  0.108700  0.108700
K  391200002060  0726  0.108700  0.108700
K  391200002060  0727  0.108700  0.108700
K  391200002060  0728  0.108700  0.108700
K  391200002060  0729  0.108700  0.108700
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K  391200002060  0731  0.108700  0.108700
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K  391200002060  0802  0.108700  0.108700
K  391200002060  0803  0.108700  0.108700
K  391200002060  0804  0.108700  0.108700
K  391200002060  0805  0.108700  0.108700
K  391200002060  0806  0.108700  0.108700
K  391200002060  0807  0.108700  0.108700
K  391200002060  0808  0.108700  0.108700
K  391200002060  0809  0.108700  0.108700
K  391200002060  0810  0.108700  0.108700
K  391200002060  0811  0.108700  0.108700
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K  391200002061  0714  0.108700  0.108700
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K  391200002061  0718  0.108700  0.108700
K  391200002061  0719  0.108700  0.108700
K  391200002061  0720  0.108700  0.108700
K  391200002061  0721  0.108700  0.108700
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K  391200002061  0724  0.108700  0.108700
K  391200002061  0725  0.108700  0.108700
K  391200002061  0726  0.108700  0.108700
K  391200002061  0727  0.108700  0.108700
K  391200002061  0728  0.108700  0.108700
K  391200002061  0729  0.108700  0.108700
K  391200002061  0730  0.108700  0.108700
K  391200002061  0731  0.108700  0.108700
K  391200002061  0801  0.108700  0.108700
K  391200002061  0802  0.108700  0.108700
K  391200002061  0803  0.108700  0.108700
K  391200002061  0804  0.108700  0.108700
K  391200002061  0805  0.108700  0.108700
K  391200002061  0806  0.108700  0.108700
K  391200002061  0807  0.108700  0.108700
K  391200002061  0808  0.108700  0.108700
K  391200002061  0809  0.108700  0.108700
K  391200002061  0810  0.108700  0.108700
K  391200002061  0811  0.108700  0.108700
K  391200002061  0812  0.108700  0.108700
K  391200002061  0813  0.108700  0.108700
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DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	391660002301	0714	0.362820	0.509390	3.53290	3.42502	4.04530	4.23408	4.23408	4.20711	4.23408	4.26105
					4.26105	4.26105	4.23408	4.23408	4.23408	4.20711	4.18015	4.20711
K	391660002301	0715	0.344370	0.544470	4.23408	4.26105	4.23408	4.26105	4.23408	4.26105	4.26105	4.26105
					4.09879	4.09879	4.09879	4.09879	4.09879	4.09879	4.20388	4.20388
K	391660002301	0716	0.335770	0.498860	4.20388	4.20388	4.20388	4.20388	4.20388	4.20388	4.20388	4.20388
					4.20388	4.15133	4.15133	4.15133	4.15133	4.15133	4.20388	4.20388
K	391660002301	0717	0.336450	0.528090	4.22386	4.22386	4.22386	4.22386	4.22386	4.22386	4.22386	4.22386
					4.22386	4.22386	4.22386	4.22386	4.22386	4.22386	4.22386	4.22386
K	391660002301	0718	0.302100	0.474170	4.22386	4.22386	4.22386	4.22386	4.22386	4.22386	3.59028	3.48468
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
K	391660002301	0719	0.362440	0.354840	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
K	391660002301	0720	0.317650	0.400420	4.43998	4.52592	3.40876	3.40876	3.40876	3.40876	4.52592	4.55456
					4.58321	4.58321	4.49727	4.55456	4.55456	4.55456	4.55456	4.49727
K	391660002301	0721	0.316480	0.299190	4.55456	4.55456	4.55456	4.55456	4.58321	4.55456	4.58321	0.00000
					4.16227	3.95152	3.95152	3.95152	4.10958	4.26765	4.26765	4.21496
K	391660002301	0722	0.307210	0.317730	4.21496	4.21496	4.21496	4.21496	4.21496	4.26765	4.26765	4.26765
					4.21496	4.21496	4.21496	4.16227	4.10958	4.10958	4.10958	4.10958
K	391660002301	0723	0.317830	0.278990	4.36607	4.36607	4.36607	4.36607	3.52644	3.55443	3.55443	3.55443
					3.61041	3.58242	4.22614	4.36607	4.36607	4.36607	4.39406	4.39406
K	391660002301	0724	0.331100	0.236560	4.39406	4.39406	4.39406	4.36607	4.36607	4.39406	4.36607	4.36607
					4.55075	3.29638	3.06301	2.53792	2.45040	2.42123	3.29638	4.69661
K	391660002301	0725	0.287090	0.205120	4.55075	4.60910	4.60910	4.60910	4.57992	4.63827	4.66744	4.57992
					4.60910	4.57992	4.57992	4.57992	4.57992	4.60910	4.63827	4.66744
K	391660002301	0726	0.361930	0.317760	3.79708	2.24787	1.82260	1.82260	2.12636	2.36938	4.19198	4.82989
					4.86026	4.82989	4.76913	4.76913	4.76913	4.79951	4.82989	4.79951
K	391660002301	0727	0.424930	0.331790	4.79951	4.73876	4.76913	4.79951	4.79951	4.82989	4.79951	4.82989
					4.44569	4.41755	3.17951	2.81373	2.84186	2.53235	4.41755	4.41755
K	391660002301	0728	0.169030	0.106580	4.50196	4.50196	4.44569	4.41755	4.41755	4.41755	4.41755	4.41755
					4.38942	4.41755	4.38942	4.44569	4.44569	4.44569	4.41755	4.44569
K	391660002301	0729	0.000000	0.000000	4.68611	4.68611	2.88829	2.21043	2.21043	2.21043	2.15148	4.56822
K	391660002301	0730	0.000000	0.000000	4.65664	4.65664	4.62717	4.65664	4.65664	4.65664	4.62717	4.65664
K	391660002301	0731	0.000000	0.000000	4.62717	4.65664	4.68611	4.62717	4.62717	4.65664	4.65664	4.65664
K	391660002301	0801	0.000000	0.000000	4.07885	2.51529	2.00543	2.00543	1.90346	1.69952	1.66553	2.48130
K	391660002301	0802	0.000000	0.000000	3.70496	3.77294	5.03059	5.33650	5.33650	5.30251	5.33650	5.30251
K	391660002301	0803	0.000000	0.000000	5.26852	5.26852	5.30251	5.33650	5.33650	5.33650	5.33650	5.33650
					4.18972	4.18972	4.18972	4.18972	4.18972	4.18972	4.18972	4.18972
					4.18972	4.18972	4.18972	4.18972	4.18972	4.18972	4.18972	4.18972
					4.18972	4.16337	4.08432	4.11067	4.08432	4.11067	4.11067	4.11067
					4.20548	4.20548	4.20548	4.20548	4.20548	4.20548	4.23210	4.23210
					4.17886	4.17886	4.17886	4.17886	4.15224	4.20548	4.15224	4.17886
					4.15224	4.12563	4.15224	4.15224	4.12563	4.07239	4.07239	4.04578
					12.95546	12.95546	12.95546	12.95546	12.95546	12.14574	10.12145	8.09716
					4.85829	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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K  391660002301  0804  0.000000  0.000000
K  391660002301  0805  0.000000  0.000000
K  391660002301  0806  0.000000  0.000000
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DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	391660002301	0807	0.319030	0.201150	0.00000	0.00000	0.00000	1.14766	2.75439	2.75439	5.01147	5.81484
					5.62356	5.16449	5.27926	5.16449	5.16449	5.16449	5.04973	5.04973
K	391660002301	0808	0.361490	0.325080	5.04973	4.97322	5.08798	5.12624	5.16449	5.12624	5.20275	5.12624
					3.77466	3.91764	3.97483	3.91764	3.51730	3.31712	3.31712	3.31712
K	391660002301	0809	0.316640	0.530400	3.51730	4.46096	4.48956	4.48956	4.46096	4.46096	4.43237	4.46096
					4.48956	4.48956	4.48956	4.54675	4.54675	4.54675	4.54675	4.51815
K	391660002301	0810	0.397060	0.458710	4.17331	4.17331	4.19989	4.19989	4.12014	4.14673	4.14673	4.14673
					4.14673	4.14673	4.19989	4.17331	4.19989	4.19989	4.19989	4.19989
K	391660002301	0811	0.317010	0.561750	4.17331	4.12014	4.17331	4.14673	4.14673	4.17331	4.14673	4.14673
					4.17103	4.17103	4.17103	4.17103	4.17103	4.14480	4.17103	4.11857
K	391660002301	0812	0.296680	0.385470	4.14480	4.17103	4.14480	4.17103	4.14480	4.14480	4.14480	4.19727
					4.17103	4.19727	4.19727	4.19727	4.17103	4.17103	4.17103	4.17103
K	391660002301	0813	0.327510	0.388050	4.14248	4.16886	4.19525	4.22163	4.14248	4.16886	4.19525	4.19525
					4.19525	4.19525	4.22163	4.22163	4.22163	4.22163	4.22163	4.22163
					4.22163	4.19525	4.19525	4.22163	4.22163	4.22163	4.01055	3.56200
					2.21093	2.80848	3.04750	3.10726	2.18105	2.18105	4.00358	4.78040
					4.75052	4.72064	4.75052	4.72064	4.75052	4.69076	4.72064	4.72064
					4.72064	4.72064	4.72064	4.75052	4.75052	4.75052	4.75052	4.69076
					4.38792	3.91280	2.06819	2.06819	3.57741	4.41587	4.44382	4.44382
					4.47177	4.47177	4.47177	4.47177	4.41587	4.41587	4.41587	4.44382
					4.38792	4.41587	4.38792	4.41587	4.41587	4.41587	4.41587	4.24818
K	391660002302	0714	0.000000	0.000000								
K	391660002302	0715	0.000000	0.000000								
K	391660002302	0716	0.000000	0.000000								
K	391660002302	0717	0.000000	0.000000								
K	391660002302	0718	0.000000	0.000000								
K	391660002302	0719	0.000000	0.000000								
K	391660002302	0720	0.000000	0.000000								
K	391660002302	0721	0.000000	0.000000								
K	391660002302	0722	0.000000	0.000000								
K	391660002302	0723	0.000000	0.000000								
K	391660002302	0724	0.000000	0.000000								
K	391660002302	0725	0.000000	0.000000								
K	391660002302	0726	0.000000	0.000000								
K	391660002302	0727	0.000000	0.000000								
K	391660002302	0728	0.000000	0.000000								
K	391660002302	0729	0.000000	0.000000								
K	391660002302	0730	0.202510	2.817000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.55524
					1.05496	2.22098	2.77623	3.44253	2.77623	4.88617	8.32870	10.88284
K	391660002302	0731	0.196100	1.953200	10.82731	11.38256	11.43808	11.38256	11.43808	2.22098	2.22098	2.16546
					2.12155	2.29357	2.00688	1.94954	2.00688	2.17689	2.12155	2.12155
K	391660002302	0801	0.169790	1.691100	2.12155	2.12155	5.33256	10.26376	10.77981	4.87385	4.93119	10.89174
					4.64449	2.23623	2.17889	2.17889	11.69724	5.16055	2.29357	2.29357
					2.64900	2.51655	2.51655	2.45033	2.38410	2.31788	2.38410	2.64900
					2.64900	2.45033	2.45033	2.58278	2.71523	3.24503	10.72847	13.64238
K	391660002302	0802	0.362510	3.610700	13.64238	4.23841	2.05298	2.51655	9.66887	2.51655	2.45033	2.58278
					1.20967	1.14764	1.14764	1.14764	1.14764	1.08560	1.17866	3.62903
					4.80769	6.51364	6.48263	6.48263	6.45161	6.20347	6.20347	6.20347
					6.20347	6.20347	6.20347	6.20347	6.26550	6.65260	2.10918	1.11662

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	391660002302	0803	0.399840	3.982580	1.04049	1.06861	1.12485	1.12485	1.12485	1.12485	1.12485	1.09673
					3.09336	5.70866	5.96175	5.96175	5.96175	5.96175	5.93363	5.96175
					5.90551	5.93363	5.96175	5.96175	6.01799	6.01799	5.62429	5.20247
K	391660002302	0804	0.383770	3.822300	1.17198	1.17198	1.17198	1.17198	1.17198	1.17198	1.17198	4.39496
					6.15294	6.15294	6.15294	6.15294	6.15294	6.15294	6.15294	6.15294
					6.15294	6.15294	6.15294	6.15294	6.15294	5.06885	1.17198	1.17198
K	391660002302	0805	0.438990	4.526100	1.05563	1.02710	0.99857	1.05563	1.05563	1.02710	1.08416	3.85164
					5.99144	5.99144	5.99144	5.93437	5.96291	5.99144	5.96291	5.99144
					5.90584	5.96291	5.93437	5.99144	5.99144	5.99144	4.19400	1.05563
K	391660002302	0806	0.393530	4.057400	1.20942	1.14576	1.20942	1.17759	1.17759	1.14576	1.24124	4.64672
					6.68364	6.68364	6.71546	6.71546	6.74729	6.74729	6.36537	6.36537
					6.61998	6.52458	6.52458	6.80585	6.77402	2.35518	1.27307	1.14576
K	391660002302	0807	0.017160	0.017690	25.54744	27.73722	46.71532	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	391660002302	0808	0.000000	0.000000								
K	391660002302	0809	0.391270	0.403410	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.15236	2.36875
					3.84122	6.40204	6.37003	6.33802	6.27400	6.65813	6.56209	6.59411
					6.59411	4.57746	6.65813	6.65813	6.65813	4.57746	6.59411	5.12163
K	391660002302	0810	0.464790	0.479210	1.21261	0.94314	1.02398	0.97008	1.07787	1.21261	3.07194	5.63190
					5.65885	5.65885	5.65885	5.65885	5.65885	5.65885	5.65885	4.85044
					5.25464	5.25464	5.25464	5.22770	5.22770	5.22770	5.25464	3.69172
K	391660002302	0811	0.291580	0.300620	3.69415	1.58934	1.54639	1.58934	1.54639	1.54639	1.50343	2.79209
					7.13058	8.11855	8.16151	8.03264	8.03264	7.30240	4.72508	4.20962
					3.26460	6.48625	6.65807	5.36941	1.67525	1.71821	1.71821	1.58934
K	391660002302	0812	0.171410	0.171240	2.47823	2.56521	2.61219	2.47823	2.41125	2.34427	2.41125	2.34427
					2.34427	9.71198	7.63563	4.01875	6.83188	10.38178	13.39584	4.95646
					2.67916	2.47823	2.61219	2.61219	2.47823	2.67916	2.88010	2.67916
K	391660002302	0813	0.182660	0.182480	2.45128	2.45128	2.51417	2.45128	2.38843	2.38843	2.26272	2.19987
					4.52545	7.85669	9.42803	9.42803	9.42803	7.03959	9.61659	6.28535
					2.51414	2.51414	2.45128	2.32558	2.45128	2.51414	2.51414	0.00000
K	392360001401	0714	0.000000	0.000000								
K	392360001401	0715	1.095920	1.660090	0.00000	0.00000	0.74953	1.84259	1.90505	2.15490	2.31105	2.59212
					3.15427	3.65396	4.12242	4.40349	4.59088	5.05933	5.12179	5.90256
					6.12117	6.24609	6.30855	6.21486	6.21486	6.96439	7.15178	7.21424
K	392360001401	0716	2.056780	3.271870	3.81154	3.77883	3.77883	3.76247	3.81154	3.74611	3.72975	3.71339
					3.74611	3.74611	3.74611	3.76247	3.76247	4.02421	4.48225	4.71127
					4.69491	4.72762	4.76034	4.74398	4.72762	4.76034	4.71127	4.76034
K	392360001401	0717	2.148260	2.445190	4.18006	4.07775	4.12160	4.07775	4.09237	4.04852	4.06313	4.00467
					4.06313	4.31160	4.26775	4.26775	4.25314	4.22391	4.19467	4.16544
					4.22391	4.22391	4.20929	4.18006	4.18006	4.09237	4.16544	4.31160
K	392360001401	0718	2.276470	2.686510	4.04748	4.07608	4.00457	4.03318	4.06178	4.07608	4.11899	4.23340
					4.24771	4.20480	4.17620	4.20480	4.21910	4.13329	4.19050	4.16189
					4.20480	4.21910	4.20480	4.21910	4.23340	4.23340	4.26201	4.23340
K	392360001401	0719	2.223870	2.428960	4.34339	4.32881	4.19763	4.18306	4.19763	4.15391	4.18306	4.15391
					4.21221	4.19763	4.19763	4.15391	4.18306	4.13933	4.15391	4.16848
					4.09561	4.09561	4.09561	4.11018	4.11018	4.09561	4.11018	4.13933
K	392360001401	0720	2.063080	2.514800	4.39560	4.36507	4.34981	4.38034	4.36507	4.38034	4.39560	4.41086
					4.41086	4.47191	4.41086	3.25091	4.54822	4.48717	4.44139	4.47191
					4.48717	4.50244	4.41086	4.51770	4.54822	4.44139	3.55616	0.00000
K	392360001401	0721	0.000000	0.000000								

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K  392360001401  0722  0.000000  0.000000
K  392360001401  0723  0.000000  0.000000
K  392360001401  0724  0.000000  0.000000
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DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	392360001401	0725	1.184450	1.165550	0.00000	1.83754	2.55659	3.19573	3.27563	3.54194	3.59520	3.88814
					4.34087	4.36750	4.52729	4.82023	4.82023	4.82023	4.84687	4.84687
K	392360001401	0726	1.487670	1.744280	4.92676	4.98002	5.03328	5.13981	5.13981	5.16644	5.16644	5.16644
					4.17391	4.15217	4.02173	4.06521	4.00000	3.91304	4.15217	4.23913
K	392360001401	0727	0.758420	0.800200	4.21739	4.19565	4.26086	4.23913	4.23913	4.21739	4.21739	4.19565
					4.19565	4.19565	4.21739	4.17391	4.15217	4.17391	4.19565	4.19565
					8.17450	8.25921	8.21685	8.89453	12.66412	10.20753	10.96992	11.01228
					10.80050	10.80050	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001401	0728	0.000000	0.000000								
K	392360001401	0729	0.000000	0.000000								
K	392360001401	0730	0.000000	0.000000								
K	392360001401	0731	0.297770	0.331130	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	7.11864	0.00000	10.50847
					8.36158	9.26553	0.00000	11.75141	11.75141	12.65536	13.22033	15.36723
K	392360001401	0801	1.409010	1.336630	3.70106	4.00948	3.98576	4.00948	4.00948	3.98576	3.89086	3.81969
					3.93831	4.29418	4.27046	4.27046	4.29418	4.24673	4.29418	4.27046
K	392360001401	0802	1.330180	1.431050	4.27046	4.34163	4.31791	4.34163	4.38908	4.34163	4.36536	4.34163
					4.22305	4.12972	4.12972	4.15305	4.19972	4.22305	4.29304	4.31637
K	392360001401	0803	1.396880	1.630260	4.22305	4.10639	4.19972	4.10639	4.17638	4.22305	4.15305	4.10639
					4.08306	4.10639	4.08306	4.12972	4.15305	4.17638	4.15305	4.15305
K	392360001401	0804	1.271190	1.780860	4.14173	4.14173	4.14173	4.14173	4.11872	4.14173	4.14173	4.14173
					4.11872	4.11872	4.11872	4.14173	4.16474	4.18775	4.18775	4.23377
K	392360001401	0805	1.340630	1.758800	4.18775	4.21076	4.21076	4.21076	4.30280	4.18775	4.14173	4.16474
					4.16091	4.16091	4.13793	4.11494	4.20689	4.25287	4.22988	4.25287
K	392360001401	0806	1.422320	2.015860	4.25287	4.22988	4.25287	4.20689	4.18390	4.11494	4.13793	4.11494
					4.11494	4.13793	4.13793	4.16091	4.11494	4.11494	4.09195	4.11494
K	392360001401	0807	1.457890	1.829610	4.06963	4.02441	4.02441	4.02441	4.02441	4.04702	4.04702	4.04702
					4.00180	4.02441	3.93398	4.09224	4.31833	4.31833	4.31833	4.25050
K	392360001401	0808	1.324580	1.546830	4.29572	4.29572	4.27311	4.29572	4.29572	4.34094	4.31833	4.31833
					4.17490	4.15293	4.21885	4.21885	4.19687	4.21885	4.19687	4.21885
K	392360001401	0809	1.803760	2.820900	4.19687	4.21885	4.21885	4.19687	4.15293	4.21885	4.19687	4.21885
					4.21885	4.26279	4.08701	3.95517	3.99912	4.02109	4.02109	4.21885
K	392360001401	0810	1.723190	2.780440	4.16192	4.13918	4.13918	4.18467	4.20741	4.16192	4.18467	4.20741
					4.18467	4.20741	4.23015	4.20741	4.18467	4.16192	4.13918	4.09370
K	392360001401	0811	1.908820	3.122330	4.04821	4.11644	4.11644	4.09370	4.18467	4.20741	4.20741	4.23015
					4.29104	4.29104	4.26772	4.29104	4.26772	4.24440	4.24440	4.19776
					4.17444	4.08115	4.10447	4.10447	4.05783	4.05783	4.03451	4.08115
					4.15111	4.15111	4.15111	4.12779	4.17444	4.15111	4.17444	4.12779
					3.58014	3.60048	3.60048	3.55980	3.53946	3.84458	3.84458	4.35313
					4.53620	4.67860	4.78030	4.75996	4.84133	4.65825	4.21074	4.12937
					4.04800	4.08868	4.14971	4.17005	4.21074	4.25142	4.29210	4.27176
					3.68439	3.91032	4.11887	4.11887	4.10149	4.11887	4.10149	4.17101
					4.31004	4.29266	4.31004	4.31004	4.27528	4.24052	4.25790	4.17101
					4.11887	4.13625	4.15363	4.20576	4.18839	4.20576	4.22314	4.27528
					4.10753	4.10753	4.00734	4.05743	4.09083	4.07413	4.10753	4.12422
					4.12422	4.07413	4.05743	4.04074	4.05743	4.04074	4.10753	4.09083
					4.15762	4.44147	4.39138	4.42477	4.44147	4.39138	4.34129	4.14092

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	392360001401	0812	2.066690	0.907460	3.50501	3.29189	3.27464	3.29189	3.27464	3.29189	3.32400	4.03159
					4.50880	4.70626	4.72272	4.55817	4.52525	4.55817	4.55817	4.54171
K	392360001401	0813	2.006030	2.047470	4.54171	4.57462	4.55817	4.50880	4.52525	4.49234	4.45943	4.37715
					4.14775	4.06949	4.18079	4.13210	4.14775	4.10079	4.14775	4.30427
K	392360001402	0714	0.436630	0.495810	4.25731	4.27296	4.28862	4.27296	4.24166	4.38253	4.35122	4.28862
					4.25731	4.30427	4.31992	4.35122	4.35122	4.00688	3.56863	3.33385
K	392360001402	0715	0.345350	0.439450	4.23876	4.25464	4.23876	4.22289	4.20701	4.22289	4.15939	4.20701
					4.20701	4.17526	4.19114	4.19114	4.15939	4.12763	4.12763	4.11176
K	392360001402	0716	0.354310	0.505210	4.12763	4.11176	4.08001	4.14351	4.15939	4.09588	4.09588	4.14351
					4.15530	4.18738	4.17134	4.18738	4.18738	4.15530	4.17134	4.17134
K	392360001402	0717	0.329780	0.329010	4.18738	4.15530	4.20343	4.07508	4.15530	4.18738	4.18738	4.17134
					4.15530	4.17134	4.18738	4.15530	4.18738	4.13925	4.15530	4.13925
K	392360001402	0718	0.316760	0.342270	4.14665	4.09862	4.13064	4.16266	4.17867	4.16266	4.17867	4.14665
					4.14665	4.11463	4.06660	4.08261	4.13064	4.13064	4.21069	4.17867
K	392360001402	0719	0.321050	0.321700	4.21069	4.24271	4.22670	4.24271	4.25872	4.21069	4.19468	4.14665
					4.23590	4.23590	4.25219	4.21961	4.20332	4.21961	4.20332	4.17073
K	392360001402	0720	0.392450	0.449020	4.17073	4.12186	4.15444	4.15444	4.17073	4.15444	4.13815	4.17073
					4.13815	4.12186	4.12186	4.13815	4.15444	4.12186	4.12186	4.10557
K	392360001402	0721	0.331040	0.416130	4.19280	4.25883	4.17629	4.17629	4.19280	4.19280	4.22581	4.25883
					4.19280	4.17629	4.19280	4.17629	4.19280	4.17629	4.17629	4.15978
K	392360001402	0722	0.100840	0.140150	4.15978	4.14328	4.12677	4.07725	4.06074	4.06074	4.09376	4.15978
					4.10130	4.10130	4.10130	4.11764	4.11764	4.11764	4.10130	4.11764
K	392360001402	0723	0.342660	0.360540	4.11764	4.11764	4.13398	4.11764	4.08496	4.03594	4.00326	3.97058
					3.95424	3.95424	3.98692	4.01960	3.97058	4.78758	4.91830	4.95098
K	392360001402	0724	0.339680	0.218290	4.21753	4.17591	4.13429	4.12042	3.87069	4.02330	4.17591	4.18978
					4.23140	4.20366	4.18978	4.20366	4.20366	4.18978	4.14816	4.20366
K	392360001402	0725	0.304230	0.341190	4.17591	4.14816	4.24528	4.20366	4.16204	4.18978	4.20366	4.18978
					4.32486	4.12503	3.83956	3.82529	3.81101	3.73965	3.53982	3.88238
K	392360001402	0726	0.000000	0.000000	4.11076	4.33913	4.31059	4.33913	4.32486	4.33913	4.31059	4.29631
K	392360001402	0727	0.000000	0.000000	4.28204	4.31059	4.33913	4.31059	4.31059	4.33913	4.35341	4.29631
K	392360001402	0728	0.000000	0.000000	4.45774	4.30815	3.70979	3.67988	3.73971	3.78459	3.81451	3.90426
K	392360001402	0729	0.000000	0.000000	3.94913	3.96409	3.91922	3.93418	4.05385	4.32311	4.44278	4.42782
K	392360001402	0730	0.000000	0.000000	4.45774	4.39790	4.44278	4.47270	4.44278	4.42782	4.48765	4.45774
K	392360001402	0731	0.000000	0.000000	4.16492	4.15099	4.16492	4.16492	4.16492	4.16492	4.19278	4.19278
					4.19278	4.17885	4.20671	4.22064	4.19278	4.15099	4.10920	4.05348
					4.15099	4.17885	4.16492	4.20671	4.19278	4.15099	4.15099	4.13706
					4.22256	4.22256	4.25081	4.26493	4.20844	4.20844	4.20844	4.22256
					4.20844	4.20844	4.19432	4.19432	4.18020	4.13783	4.10958	4.08134
					4.05309	4.06722	4.05309	4.06722	4.16607	4.23668	4.12371	4.10958
					4.35428	4.35428	4.36914	4.36914	4.36914	4.36914	4.36914	4.41373
					4.41373	4.39887	4.38400	4.38400	4.38400	4.39887	4.39887	4.38400
					4.33942	4.26512	4.29484	4.30970	3.81928	3.25456	2.86818	2.73443

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	392360001402	0801	0.039210	0.041920	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001402	0802	0.295150	0.358280	0.00000	4.36835	20.77922	9.79929	12.75088	15.46635	17.70956	19.12632
					3.00066	3.10013	3.01724	3.05039	3.06697	3.08355	3.10013	3.48143
K	392360001402	0803	0.296430	0.355210	4.22745	4.79111	4.95689	4.94031	4.90716	4.97347	5.02320	4.97347
					5.00663	4.74137	4.80769	4.67506	4.64190	4.62533	4.29376	3.51458
K	392360001402	0804	0.270510	0.383640	3.92881	4.02955	3.99597	3.89523	3.87844	3.87844	3.91202	3.89523
					3.89523	3.89523	3.92881	3.96239	3.96239	3.96239	3.87844	3.96239
K	392360001402	0805	0.219120	0.284250	3.92881	3.94560	4.48267	4.98656	4.98656	5.02014	4.95298	4.83546
					4.50970	4.36527	3.35419	2.95297	3.06531	3.20975	3.30605	3.56283
K	392360001402	0806	0.113890	0.145690	3.80356	3.80356	4.02824	4.41341	4.71834	4.75044	4.58995	4.58995
					4.60600	4.60600	4.58995	4.58995	4.62205	4.65414	4.65414	4.65414
K	392360001402	0807	0.000000	0.000000	6.17965	6.13718	6.11594	6.17965	6.15842	6.17965	6.11594	6.20089
K	392360001402	0808	0.000000	0.000000	6.26459	6.26459	6.22212	6.30707	6.45572	6.43448	6.43448	6.34954
K	392360001402	0809	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001402	0810	0.000000	0.000000	0.00000	5.05458	6.14638	5.94419	6.14638	6.34856	6.55074	6.14638
K	392360001402	0811	0.000000	0.000000	6.06550	6.30812	6.30812	6.55074	6.51031	6.51031	6.42943	6.51031
K	392360001402	0812	0.000000	0.000000	6.46987	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001402	0813	0.000000	0.000000								
K	392360001403	0714	0.532220	0.521310	1.80690	0.00000	0.00000	0.00000	0.00000	0.00000	1.13268	3.04746
					6.98489	9.11542	9.49298	1.42934	9.46601	9.51995	9.27723	9.19633
K	392360001403	0715	0.834930	0.817810	9.33117	6.71521	0.00000	0.00000	0.48543	3.45199	9.54692	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	3.31248
K	392360001403	0716	0.894060	0.875740	5.94896	6.27006	6.27006	6.27006	6.27006	6.25316	6.25316	6.25316
					6.21936	6.23626	6.21936	6.05036	6.28696	5.59405	5.54334	4.74902
K	392360001403	0717	0.749530	0.734160	3.11446	1.54117	0.93112	0.85085	0.85085	0.85085	0.83480	1.99068
					4.44694	5.77941	5.92390	5.92390	5.90785	5.90785	5.92390	5.90785
K	392360001403	0718	0.564510	0.552940	5.60282	5.55466	5.79547	5.79547	5.76336	5.74731	5.31385	3.74056
					2.02987	0.00000	0.00000	0.00000	0.00000	0.90003	0.00000	1.11068
K	392360001403	0719	0.719090	0.715730	2.18307	3.25545	5.89612	6.60666	6.58751	6.72156	6.66411	6.66411
					6.70241	6.64496	6.58751	6.62581	6.60666	6.64496	6.68326	4.88318
K	392360001403	0720	0.326310	0.324790	4.43838	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.94222
					1.16538	1.41333	1.48772	1.48772	1.46293	5.65335	8.23208	8.72799
K	392360001403	0721	0.072660	0.072320	8.72799	8.70319	8.70319	8.70319	8.45524	8.75278	8.13290	4.81031
					0.00000	0.00000	0.00000	0.00000	0.00000	1.06579	0.00000	3.32035
					5.53392	2.66448	5.94384	6.35376	0.00000	6.43574	6.33326	6.82516
					7.05062	7.13260	7.13260	7.09161	7.11211	7.15310	7.17360	5.67739
					0.00000	0.00000	0.00000	0.00000	0.00000	1.67118	0.00000	4.06504
					11.29177	14.95031	15.40198	15.40198	15.53748	12.46612	3.97470	2.75519
					2.48419	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.85311	12.27364
					12.27364	14.08450	26.76056	13.88329	11.87122	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	392360001403	0722	0.325280	0.323760	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	2.26551	2.89986	2.99048	3.08110	9.10738	14.58994
					16.03987	16.13049	15.13366	8.88083	3.21703	5.66379	0.00000	0.00000
K	392360001403	0723	0.280470	0.279160	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.40655	6.14439
					11.82795	14.43932	16.64106	17.05069	12.28878	6.86123	3.12339	2.81618
					2.76497	3.63543	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001403	0724	0.063230	0.062930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					12.45136	20.62256	39.29961	27.62645	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001403	0725	0.000000	0.000000								
K	392360001403	0726	0.749160	0.745660	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.61047
					2.12682	4.54903	6.36077	6.85309	6.83339	6.81370	6.81370	6.77432
					6.81370	6.71524	6.65616	6.61677	6.73493	6.79401	6.26230	5.67152
K	392360001403	0727	0.813420	0.809620	3.62384	0.00000	0.00000	0.00000	0.97843	0.86972	0.00000	1.61261
					1.28646	6.35984	6.34172	6.16053	6.14241	6.12429	6.12429	6.14241
					6.17865	6.16053	6.26925	6.32360	6.26925	6.26925	6.21489	4.54792
K	392360001403	0728	0.419160	0.417200	0.00000	0.00000	0.00000	0.00000	1.86357	1.93389	0.00000	1.89873
					4.43037	10.47819	10.93530	11.04078	11.39240	11.53305	11.49789	11.49789
					11.49789	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001403	0729	0.000000	0.000000								
K	392360001403	0730	0.000000	0.000000								
K	392360001403	0731	0.000000	0.000000								
K	392360001403	0801	0.011850	0.011800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	32.92682	67.07317	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001403	0802	0.181820	0.180970	0.00000	0.00000	0.00000	0.00000	0.00000	3.10015	4.84896	4.61049
					4.68998	4.68998	6.12082	5.00794	4.05405	7.86963	5.88235	4.76947
					14.86486	15.18282	5.72337	4.29252	4.29252	0.00000	0.00000	0.00000
K	392360001403	0803	0.298330	0.276450	0.00000	0.00000	0.00000	0.00000	0.00000	1.62423	2.45829	2.67778
					2.76558	2.67778	2.50219	3.51185	3.90693	6.62862	7.94556	12.33538
					15.84723	13.21334	10.62335	4.38981	3.11676	3.77524	0.00000	0.00000
K	392360001403	0804	0.481670	0.446350	0.00000	0.00000	0.00000	0.00000	0.05437	1.19630	1.65851	1.79445
					1.63132	2.20228	2.17509	2.50135	2.96356	7.09624	9.81511	9.97824
					9.92387	9.95106	9.92387	8.91789	7.93909	6.90592	3.37139	0.00000
K	392360001403	0805	0.691470	0.640760	0.00000	0.00000	0.00000	0.00000	0.00000	0.90909	1.02272	1.04166
					2.31060	5.79545	6.79924	6.83712	6.81818	6.81818	6.83712	6.87500
					6.72348	6.70454	6.76136	6.66666	6.68560	6.59090	5.18939	2.61363
K	392360001403	0806	0.851730	0.847940	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	5.56962
					14.68354	16.20253	15.69620	15.94936	15.94936	15.94936	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001403	0807	0.000000	0.000000								
K	392360001403	0808	0.000000	0.000000								
K	392360001403	0809	0.701290	0.649860	0.00000	0.00000	0.00000	0.00000	0.00000	0.76563	1.13912	1.15779
					1.36321	3.45471	5.73295	6.85340	6.77871	6.81605	6.83473	6.85340
					6.85340	6.83473	6.81605	6.77871	6.77871	6.79738	6.74136	4.64935
K	392360001403	0810	0.674570	0.625100	1.82488	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					3.88274	6.62007	7.04717	7.20248	7.26072	7.26072	7.24131	7.26072
					7.22189	7.26072	7.24131	5.80469	6.54241	6.25121	4.07687	0.00000

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	392360001403	0811	0.039420	0.036530	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					19.60132	30.89700	25.58139	23.92026	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001403	0812	0.000000	0.000000								
K	392360001403	0813	0.000000	0.000000								
K	392360001404	0714	0.000000	0.000000								
K	392360001404	0715	0.000000	0.000000								
K	392360001404	0716	0.000000	0.000000								
K	392360001404	0717	0.000000	0.000000								
K	392360001404	0718	0.000000	0.000000								
K	392360001404	0719	0.000000	0.000000								
K	392360001404	0720	0.000000	0.000000								
K	392360001404	0721	0.000000	0.000000								
K	392360001404	0722	0.000000	0.000000								
K	392360001404	0723	0.000000	0.000000								
K	392360001404	0724	0.000000	0.000000								
K	392360001404	0725	0.000000	0.000000								
K	392360001404	0726	0.353070	0.359970	0.00000	0.00000	0.00000	0.00000	0.00000	0.77922	1.78107	2.70871
					2.70871	3.93320	5.04638	6.30797	6.23376	6.23376	6.12244	6.08534
					6.04823	7.05009	8.23747	8.60853	7.90352	7.60667	6.60482	0.00000
K	392360001404	0727	0.687530	0.700960	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.04758
					2.57457	4.11931	5.30894	5.73508	6.58735	6.80042	6.97798	6.96022
					6.99573	6.99573	6.97798	6.99573	6.96022	6.94247	6.88920	5.13139
K	392360001404	0728	0.568450	0.579550	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	4.35584	0.96796
					2.44295	4.01014	0.00000	0.00000	0.00000	6.36091	6.61442	8.06637
					8.96519	9.03433	8.91910	8.94215	8.89605	8.84996	8.57340	5.00115
K	392360001404	0729	0.432720	0.441170	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.54405
					4.45049	8.68907	11.29276	11.11111	7.14501	5.87344	8.77989	8.84044
					8.81017	8.84044	7.72025	3.05782	1.93763	1.90735	0.00000	0.00000
K	392360001404	0730	0.297920	0.303740	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	5.21776
					9.78870	14.23027	16.34325	15.61017	10.86675	5.39025	3.27727	3.01854
					2.67356	2.75981	3.66537	4.35532	2.88293	0.00000	0.00000	0.00000
K	392360001404	0731	0.000000	0.000000								
K	392360001404	0801	0.000000	0.000000								
K	392360001404	0802	0.031220	0.031830	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	17.28395
					24.27983	24.69135	33.74485	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001404	0803	0.203720	0.193370	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					3.31428	3.48571	3.54285	4.74285	5.42857	8.51428	10.11428	16.17142
					21.31428	15.88571	7.48571	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001404	0804	0.424540	0.402980	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02741	1.09679
					1.61776	2.08390	2.08390	2.00164	3.20811	7.45818	10.33726	10.58404
					10.66630	10.74856	10.66630	9.29531	7.67754	6.85494	3.59199	0.00000
K	392360001404	0805	0.633380	0.601210	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					2.84874	6.06506	7.24131	7.25969	7.22293	7.20455	7.18617	7.14942
					7.09428	7.11266	7.07590	7.03914	7.02076	7.02076	5.45855	0.00000
K	392360001404	0806	0.000000	0.000000								
K	392360001404	0807	0.000000	0.000000								
K	392360001404	0808	0.000000	0.000000								

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
K	392360001404	0809	0.618130	0.586730	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.60263
					0.77212	1.80790	4.70809	6.87382	7.17514	7.25047	7.25047	7.36346
K	392360001404	0810	0.623830	0.592150	7.32580	7.30696	7.30696	7.30696	7.28813	7.28813	7.19397	5.17890
					0.00000	0.00000	0.00000	0.00000	0.00000	0.98899	0.00000	1.34353
K	392360001404	0811	0.056570	0.053700	3.67605	6.47508	7.33345	7.40809	7.38943	7.37077	7.37077	7.35211
					7.37077	7.37077	7.31479	5.78466	6.58704	6.00858	2.85501	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	10.08230	10.90534
					11.93415	15.63786	12.96296	12.55144	13.58024	12.34567	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
K	392360001404	0812	0.000000	0.000000								
K	392360001404	0813	0.000000	0.000000								
K	392360001409	0714	0.000000	0.000000								
K	392360001409	0715	0.000000	0.000000								
K	392360001409	0716	0.000000	0.000000								
K	392360001409	0717	0.000000	0.000000								
K	392360001409	0718	0.000000	0.000000								
K	392360001409	0719	0.000000	0.000000								
K	392360001409	0720	0.000000	0.000000								
K	392360001409	0721	0.000000	0.000000								
K	392360001409	0722	0.000000	0.000000								
K	392360001409	0723	0.000000	0.000000								
K	392360001409	0724	0.000000	0.000000								
K	392360001409	0725	0.000000	0.000000								
K	392360001409	0726	0.000000	0.000000								
K	392360001409	0727	0.000000	0.000000								
K	392360001409	0728	0.000000	0.000000								
K	392360001409	0729	0.000000	0.000000								
K	392360001409	0730	0.000000	0.000000								
K	392360001409	0731	0.000000	0.000000								
K	392360001409	0801	0.000000	0.000000								
K	392360001409	0802	0.000000	0.000000								
K	392360001409	0803	0.000000	0.000000								
K	392360001409	0804	0.000000	0.000000								
K	392360001409	0805	0.000000	0.000000								
K	392360001409	0806	0.000000	0.000000								
K	392360001409	0807	0.000000	0.000000								
K	392360001409	0808	0.000000	0.000000								
K	392360001409	0809	0.000000	0.000000								
K	392360001409	0810	0.000000	0.000000								
K	392360001409	0811	0.000000	0.000000								
K	392360001409	0812	0.000000	0.000000								
K	392360001409	0813	0.000000	0.000000								
K	392360001410	0714	0.000000	0.000000								
K	392360001410	0715	0.000000	0.000000								
K	392360001410	0716	0.000000	0.000000								
K	392360001410	0717	0.000000	0.000000								
K	392360001410	0718	0.000000	0.000000								
K	392360001410	0719	0.000000	0.000000								
K	392360001410	0720	0.000000	0.000000								
K	392360001410	0721	0.000000	0.000000								
K	392360001410	0722	0.000000	0.000000								

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K  392360001411  0727  0.000000  0.000000
K  392360001411  0728  0.000000  0.000000
K  392360001411  0729  0.000000  0.000000
K  392360001411  0730  0.000000  0.000000
K  392360001411  0731  0.000000  0.000000
K  392360001411  0801  0.000000  0.000000
K  392360001411  0802  0.000000  0.000000
K  392360001411  0803  0.000000  0.000000
K  392360001411  0804  0.000000  0.000000
K  392360001411  0805  0.000000  0.000000
K  392360001411  0806  0.000000  0.000000
K  392360001411  0807  0.000000  0.000000
K  392360001411  0808  0.000000  0.000000
K  392360001411  0809  0.000000  0.000000
K  392360001411  0810  0.000000  0.000000
K  392360001411  0811  0.000000  0.000000
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K  392360001513  0720  0.121739  0.121739
K  392360001513  0721  0.121739  0.121739
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K	392360001513	0727	0.121739	0.121739
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K	392360001513	0729	0.121739	0.121739
K	392360001513	0730	0.121739	0.121739
K	392360001513	0731	0.000000	0.000000
K	392360001513	0801	0.000000	0.000000
K	392360001513	0802	0.121739	0.121739
K	392360001513	0803	0.121739	0.121739
K	392360001513	0804	0.121739	0.121739
K	392360001513	0805	0.121739	0.121739
K	392360001513	0806	0.121739	0.121739
K	392360001513	0807	0.000000	0.000000
K	392360001513	0808	0.000000	0.000000
K	392360001513	0809	0.121739	0.121739
K	392360001513	0810	0.121739	0.121739
K	392360001513	0811	0.121739	0.121739
K	392360001513	0812	0.121739	0.121739
K	392360001513	0813	0.121739	0.121739
K	392360001514	0714	0.121739	0.121739
K	392360001514	0715	0.121739	0.121739
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K	392360001514	0717	0.000000	0.000000
K	392360001514	0718	0.000000	0.000000
K	392360001514	0719	0.121739	0.121739
K	392360001514	0720	0.121739	0.121739
K	392360001514	0721	0.121739	0.121739
K	392360001514	0722	0.121739	0.121739
K	392360001514	0723	0.121739	0.121739
K	392360001514	0724	0.000000	0.000000
K	392360001514	0725	0.000000	0.000000
K	392360001514	0726	0.121739	0.121739
K	392360001514	0727	0.121739	0.121739
K	392360001514	0728	0.121739	0.121739
K	392360001514	0729	0.121739	0.121739
K	392360001514	0730	0.121739	0.121739
K	392360001514	0731	0.000000	0.000000
K	392360001514	0801	0.000000	0.000000
K	392360001514	0802	0.121739	0.121739
K	392360001514	0803	0.121739	0.121739
K	392360001514	0804	0.121739	0.121739
K	392360001514	0805	0.121739	0.121739
K	392360001514	0806	0.121739	0.121739
K	392360001514	0807	0.000000	0.000000
K	392360001514	0808	0.000000	0.000000
K	392360001514	0809	0.121739	0.121739
K	392360001514	0810	0.121739	0.121739
K	392360001514	0811	0.121739	0.121739
K	392360001514	0812	0.121739	0.121739
K	392360001514	0813	0.121739	0.121739
K	392360001515	0714	0.121739	0.121739
K	392360001515	0715	0.121739	0.121739
K	392360001515	0716	0.121739	0.121739
K	392360001515	0717	0.000000	0.000000
K	392360001515	0718	0.000000	0.000000
K	392360001515	0719	0.121739	0.121739
K	392360001515	0720	0.121739	0.121739

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K  392360001515  0727  0.121739  0.121739
K  392360001515  0728  0.121739  0.121739
K  392360001515  0729  0.121739  0.121739
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0 RECORDS PRINTED

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P 90100111	0714	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
				4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
P 90100111	0715	0.010870	0.010870	4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
				3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
P 90100111	0716	0.010870	0.010870	4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
				4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P 90100111	0717	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
				4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
P 90100111	0718	0.010870	0.010870	4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
				3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
P 90100111	0719	0.010870	0.010870	4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
				4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P 90100111	0720	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
				4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
P 90100111	0721	0.010870	0.010870	4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
				3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
P 90100111	0722	0.010870	0.010870	4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
				4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P 90100111	0723	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
				4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
P 90100111	0724	0.010870	0.010870	4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
				3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
P 90100111	0725	0.010870	0.010870	4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
				4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P 90100111	0726	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
				4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
P 90100111	0727	0.010870	0.010870	4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
				3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
P 90100111	0728	0.010870	0.010870	4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
				4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P 90100111	0729	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
				4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
				4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90100111	0730	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0731	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0801	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0802	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0803	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0804	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0805	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.137.3	4.03632	3.93541	3.73360
P	90100111	0806	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0807	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0808	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0809	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0810	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0811	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0812	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100111	0813	0.010870	0.010870	3.53178	3.32996	3.22906	3.22906	3.22906	3.32996	3.83451	3.83451
					4.84359	4.84359	5.14631	5.04540	4.94450	4.84359	4.64177	4.54086
					4.43995	4.43995	4.54086	4.33905	4.13723	4.03632	3.93541	3.73360
P	90100330	0714	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90100330	0715	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0716	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0717	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0718	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0719	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0720	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0721	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0722	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0723	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0724	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0725	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0726	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0727	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0728	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0729	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0730	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90100330	0731	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0801	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0802	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0803	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0804	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0805	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0806	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0807	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0808	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0809	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0810	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0811	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0812	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100330	0813	0.010870	0.010870	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0714	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0715	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90100500	0716	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0717	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0718	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0719	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0720	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0721	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0722	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0723	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0724	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0725	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0726	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0727	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0728	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0729	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0730	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0731	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01	02	03	04	05	06	07	08
					09	10	11	12	13	14	15	16
					17	18	19	20	21	22	23	24
P	90100500	0801	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0802	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0803	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0804	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0805	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0806	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0807	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0808	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0809	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0810	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0811	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0812	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100500	0813	0.096634	0.096634	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0714	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0715	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0716	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90100600	0717	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0718	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0719	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0720	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0721	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0722	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0723	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0724	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0725	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0726	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0727	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0728	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0729	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0730	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0731	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0801	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90100600	0802	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0803	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0804	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0805	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0806	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0807	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0808	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0809	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0810	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0811	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0812	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
P	90100600	0813	0.000000	0.000000	3.50701	3.30661	3.20641	3.20641	3.20641	3.30661	3.80761	4.50901
					4.80961	4.80961	5.11022	5.01002	4.90981	4.80961	4.60921	4.50901
					4.40881	4.40881	4.50901	4.30861	4.10821	4.00801	3.90781	3.70741
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P	90600700	0804	0.253200	0.253200
P	90600700	0805	0.253200	0.253200
P	90600700	0806	0.253200	0.253200
P	90600700	0807	0.253200	0.253200
P	90600700	0808	0.000000	0.000000
P	90600700	0809	0.253200	0.253200
P	90600700	0810	0.253200	0.253200
P	90600700	0811	0.253200	0.253200
P	90600700	0812	0.253200	0.253200
P	90600700	0813	0.253200	0.253200

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90600800	0714	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0715	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
P	90600800	0716	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0717	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0718	0.000000	0.000000	20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0719	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0720	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0721	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0722	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0723	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0724	0.204310	0.204310	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	20.00000	20.00000
P	90600800	0725	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0726	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0727	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0728	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0729	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0730	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0731	0.204310	0.204310	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0801	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90600800	0802	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0803	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
P	90600800	0804	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0805	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0806	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0807	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	20.00000	20.00000
P	90600800	0808	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0809	0.467600	0.467600								
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	90600800	0810	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
P	90600800	0811	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600800	0812	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	8.33333	8.33333	8.33333
P	90600800	0813	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					8.33333	8.33333	8.33333	8.33333	8.33333	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90600900	0714	0.494650	0.494650								
P	90600900	0715	0.494650	0.494650								
P	90600900	0716	0.494650	0.494650								
P	90600900	0717	1.236300	1.236300								
P	90600900	0718	1.236300	1.236300								
P	90600900	0719	0.494650	0.494650								
P	90600900	0720	0.494650	0.494650								
P	90600900	0721	0.494650	0.494650								
P	90600900	0722	0.494650	0.494650								
P	90600900	0723	0.494650	0.494650								
P	90600900	0724	1.236300	1.236300								
P	90600900	0725	1.236300	1.236300								
P	90600900	0726	0.494650	0.494650								
P	90600900	0727	0.494650	0.494650								
P	90600900	0728	0.494650	0.494650								
P	90600900	0729	0.494650	0.494650								
P	90600900	0730	0.494650	0.494650								

P	90600900	0731	1.236300	1.236300
P	90600900	0801	1.236300	1.236300
P	90600900	0802	0.494650	0.494650
P	90600900	0803	0.494650	0.494650
P	90600900	0804	0.494650	0.494650
P	90600900	0805	0.494650	0.494650
P	90600900	0806	0.494650	0.494650
P	90600900	0807	1.236300	1.236300
P	90600900	0808	1.236300	1.236300
P	90600900	0809	0.494650	0.494650
P	90600900	0810	0.494650	0.494650
P	90600900	0811	0.494650	0.494650
P	90600900	0812	0.494650	0.494650
P	90600900	0813	0.494650	0.494650
P	90700700	0714	0.253200	0.253200
P	90700700	0715	0.253200	0.253200
P	90700700	0716	0.253200	0.253200
P	90700700	0717	0.253200	0.253200
P	90700700	0718	0.000000	0.000000
P	90700700	0719	0.253200	0.253200
P	90700700	0720	0.253200	0.253200
P	90700700	0721	0.253200	0.253200
P	90700700	0722	0.253200	0.253200
P	90700700	0723	0.253200	0.253200
P	90700700	0724	0.253200	0.253200
P	90700700	0725	0.000000	0.000000
P	90700700	0726	0.253200	0.253200
P	90700700	0727	0.253200	0.253200
P	90700700	0728	0.253200	0.253200
P	90700700	0729	0.253200	0.253200
P	90700700	0730	0.253200	0.253200
P	90700700	0731	0.253200	0.253200
P	90700700	0801	0.000000	0.000000
P	90700700	0802	0.253200	0.253200
P	90700700	0803	0.253200	0.253200
P	90700700	0804	0.253200	0.253200
P	90700700	0805	0.253200	0.253200
P	90700700	0806	0.253200	0.253200
P	90700700	0807	0.253200	0.253200
P	90700700	0808	0.000000	0.000000
P	90700700	0809	0.253200	0.253200
P	90700700	0810	0.253200	0.253200
P	90700700	0811	0.253200	0.253200
P	90700700	0812	0.253200	0.253200
P	90700700	0813	0.253200	0.253200

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90700800	0714	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0715	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0716	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0717	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0718	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0719	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0720	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0721	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0722	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0723	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0724	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0725	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0726	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0727	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0728	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0729	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0730	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0731	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0801	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90700800	0802	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0803	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0804	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0805	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0806	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0807	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0808	0.000000	0.000000								
P	90700800	0809	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0810	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0811	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0812	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90700800	0813	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	90702400	0714	0.301750	0.301750								
P	90702400	0715	0.301750	0.301750								
P	90702400	0716	0.301750	0.301750								
P	90702400	0717	0.301750	0.301750								
P	90702400	0718	0.091250	0.091250								
P	90702400	0719	0.301750	0.301750								
P	90702400	0720	0.301750	0.301750								
P	90702400	0721	0.301750	0.301750								
P	90702400	0722	0.301750	0.301750								
P	90702400	0723	0.301750	0.301750								
P	90702400	0724	0.301750	0.301750								
P	90702400	0725	0.091250	0.091250								
P	90702400	0726	0.301750	0.301750								
P	90702400	0727	0.301750	0.301750								
P	90702400	0728	0.301750	0.301750								
P	90702400	0729	0.301750	0.301750								
P	90702400	0730	0.301750	0.301750								

P	90702400	0731	0.301750	0.301750
P	90702400	0801	0.091250	0.091250
P	90702400	0802	0.301750	0.301750
P	90702400	0803	0.301750	0.301750
P	90702400	0804	0.301750	0.301750
P	90702400	0805	0.301750	0.301750
P	90702400	0806	0.301750	0.301750
P	90702400	0807	0.301750	0.301750
P	90702400	0808	0.091250	0.091250
P	90702400	0809	0.301750	0.301750
P	90702400	0810	0.301750	0.301750
P	90702400	0811	0.301750	0.301750
P	90702400	0812	0.301750	0.301750
P	90702400	0813	0.301750	0.301750

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90803100	0714	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0715	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0716	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0717	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0718	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0719	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0720	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0721	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0722	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0723	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0724	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0725	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0726	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0727	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0728	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0729	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90803100	0730	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
P	90803100	0731	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0801	0.271750	0.271750	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803100	0802	0.271750	0.271750	3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
P	90803100	0803	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0804	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0805	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0806	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0807	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0808	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0809	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0810	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0811	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0812	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
P	90803100	0813	0.271750	0.271750	5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
					3.00000	3.00000	3.00000	3.00000	4.00000	4.00000	4.00000	5.00000
					5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000	5.00000
					5.00000	5.00000	5.00000	4.00000	3.00000	3.00000	3.00000	3.00000
P	90803200	0714	0.190250	0.190250								
P	90803200	0715	0.190250	0.190250								
P	90803200	0716	0.190250	0.190250								
P	90803200	0717	0.475500	0.475500								
P	90803200	0718	0.475500	0.475500								
P	90803200	0719	0.190250	0.190250								

P	90803200	0720	0.190250	0.190250
P	90803200	0721	0.190250	0.190250
P	90803200	0722	0.190250	0.190250
P	90803200	0723	0.190250	0.190250
P	90803200	0724	0.475500	0.475500
P	90803200	0725	0.475500	0.475500
P	90803200	0726	0.190250	0.190250
P	90803200	0727	0.190250	0.190250
P	90803200	0728	0.190250	0.190250
P	90803200	0729	0.190250	0.190250
P	90803200	0730	0.190250	0.190250
P	90803200	0731	0.475500	0.475500
P	90803200	0801	0.475500	0.475500
P	90803200	0802	0.190250	0.190250
P	90803200	0803	0.190250	0.190250
P	90803200	0804	0.190250	0.190250
P	90803200	0805	0.190250	0.190250
P	90803200	0806	0.190250	0.190250
P	90803200	0807	0.475500	0.475500
P	90803200	0808	0.475500	0.475500
P	90803200	0809	0.190250	0.190250
P	90803200	0810	0.190250	0.190250
P	90803200	0811	0.190250	0.190250
P	90803200	0812	0.190250	0.190250
P	90803200	0813	0.190250	0.190250

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90803300	0714	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0715	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0716	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0717	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0718	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0719	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0720	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0721	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0722	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0723	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0724	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0725	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0726	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0727	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0728	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0729	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90803300	0730	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0731	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0801	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0802	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0803	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0804	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0805	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0806	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0807	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0808	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0809	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000	
P	90803300	0810	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0811	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0812	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90803300	0813	0.271750	0.271750	3.00000	2.00000	1.00000	1.00000	1.00000	1.00000	1.00000	2.00000
					2.00000	3.00000	4.00000	4.00000	5.00000	5.00000	6.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	6.00000	4.00000
P	90900440	0714	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90900440	0715	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0716	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0717	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0718	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0719	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0720	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0721	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0722	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0723	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0724	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0725	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0726	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0727	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0728	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0729	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0730	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90900440	0731	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0801	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0802	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0803	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0804	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0805	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0806	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0807	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0808	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0809	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0810	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0811	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0812	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90900440	0813	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0714	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0715	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90904230	0716	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0717	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0718	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0719	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0720	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0721	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0722	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0723	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0724	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0725	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0726	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0727	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0728	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0729	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0730	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0731	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	90904230	0801	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0802	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0803	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0804	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0805	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0806	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0807	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0808	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0809	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0810	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0811	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0812	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904230	0813	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	90904430	0714	0.380500	0.380500								
P	90904430	0715	0.380500	0.380500								
P	90904430	0716	0.380500	0.380500								
P	90904430	0717	0.951000	0.951000								
P	90904430	0718	0.951000	0.951000								
P	90904430	0719	0.380500	0.380500								
P	90904430	0720	0.380500	0.380500								
P	90904430	0721	0.380500	0.380500								
P	90904430	0722	0.380500	0.380500								
P	90904430	0723	0.380500	0.380500								
P	90904430	0724	0.951000	0.951000								
P	90904430	0725	0.951000	0.951000								

P	90904430	0726	0.380500	0.380500
P	90904430	0727	0.380500	0.380500
P	90904430	0728	0.380500	0.380500
P	90904430	0729	0.380500	0.380500
P	90904430	0730	0.380500	0.380500
P	90904430	0731	0.951000	0.951000
P	90904430	0801	0.951000	0.951000
P	90904430	0802	0.380500	0.380500
P	90904430	0803	0.380500	0.380500
P	90904430	0804	0.380500	0.380500
P	90904430	0805	0.380500	0.380500
P	90904430	0806	0.380500	0.380500
P	90904430	0807	0.951000	0.951000
P	90904430	0808	0.951000	0.951000
P	90904430	0809	0.380500	0.380500
P	90904430	0810	0.380500	0.380500
P	90904430	0811	0.380500	0.380500
P	90904430	0812	0.380500	0.380500
P	90904430	0813	0.380500	0.380500
P	91002400	0714	0.379800	0.379800
P	91002400	0715	0.379800	0.379800
P	91002400	0716	0.379800	0.379800
P	91002400	0717	0.379800	0.379800
P	91002400	0718	0.000000	0.000000
P	91002400	0719	0.379800	0.379800
P	91002400	0720	0.379800	0.379800
P	91002400	0721	0.379800	0.379800
P	91002400	0722	0.379800	0.379800
P	91002400	0723	0.379800	0.379800
P	91002400	0724	0.379800	0.379800
P	91002400	0725	0.000000	0.000000
P	91002400	0726	0.379800	0.379800
P	91002400	0727	0.379800	0.379800
P	91002400	0728	0.379800	0.379800
P	91002400	0729	0.379800	0.379800
P	91002400	0730	0.379800	0.379800
P	91002400	0731	0.379800	0.379800
P	91002400	0801	0.000000	0.000000
P	91002400	0802	0.379800	0.379800
P	91002400	0803	0.379800	0.379800
P	91002400	0804	0.379800	0.379800
P	91002400	0805	0.379800	0.379800
P	91002400	0806	0.379800	0.379800
P	91002400	0807	0.379800	0.379800
P	91002400	0808	0.000000	0.000000
P	91002400	0809	0.379800	0.379800
P	91002400	0810	0.379800	0.379800
P	91002400	0811	0.379800	0.379800
P	91002400	0812	0.379800	0.379800
P	91002400	0813	0.379800	0.379800
P	91207100	0714	0.279500	0.279500
P	91207100	0715	0.294750	0.294750
P	91207100	0716	0.331250	0.331250
P	91207100	0717	0.297000	0.297000
P	91207100	0718	0.294750	0.294750
P	91207100	0719	0.272000	0.272000
P	91207100	0720	0.272000	0.272000
P	91207100	0721	0.279500	0.279500
P	91207100	0722	0.294750	0.294750
P	91207100	0723	0.331250	0.331250
P	91207100	0724	0.297000	0.297000

P	91207100	0725	0.294750	0.294750
P	91207100	0726	0.272000	0.272000
P	91207100	0727	0.272000	0.272000
P	91207100	0728	0.279500	0.279500
P	91207100	0729	0.294750	0.294750
P	91207100	0730	0.331250	0.331250
P	91207100	0731	0.297000	0.297000
P	91207100	0801	0.294750	0.294750
P	91207100	0802	0.272000	0.272000
P	91207100	0803	0.272000	0.272000
P	91207100	0804	0.279500	0.279500
P	91207100	0805	0.294750	0.294750
P	91207100	0806	0.331250	0.331250
P	91207100	0807	0.297000	0.297000
P	91207100	0808	0.294750	0.294750
P	91207100	0809	0.272000	0.272000
P	91207100	0810	0.272000	0.272000
P	91207100	0811	0.279500	0.279500
P	91207100	0812	0.294750	0.294750
P	91207100	0813	0.331250	0.331250
P	91207200	0714	0.190250	0.190250
P	91207200	0715	0.190250	0.190250
P	91207200	0716	0.190250	0.190250
P	91207200	0717	0.475500	0.475500
P	91207200	0718	0.475500	0.475500
P	91207200	0719	0.190250	0.190250
P	91207200	0720	0.190250	0.190250
P	91207200	0721	0.190250	0.190250
P	91207200	0722	0.190250	0.190250
P	91207200	0723	0.190250	0.190250
P	91207200	0724	0.475500	0.475500
P	91207200	0725	0.475500	0.475500
P	91207200	0726	0.190250	0.190250
P	91207200	0727	0.190250	0.190250
P	91207200	0728	0.190250	0.190250
P	91207200	0729	0.190250	0.190250
P	91207200	0730	0.190250	0.190250
P	91207200	0731	0.475500	0.475500
P	91207200	0801	0.475500	0.475500
P	91207200	0802	0.190250	0.190250
P	91207200	0803	0.190250	0.190250
P	91207200	0804	0.190250	0.190250
P	91207200	0805	0.190250	0.190250
P	91207200	0806	0.190250	0.190250
P	91207200	0807	0.475500	0.475500
P	91207200	0808	0.475500	0.475500
P	91207200	0809	0.190250	0.190250
P	91207200	0810	0.190250	0.190250
P	91207200	0811	0.190250	0.190250
P	91207200	0812	0.190250	0.190250
P	91207200	0813	0.190250	0.190250

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91207300	0714	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0715	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0716	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0717	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0718	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0719	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0720	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0721	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0722	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0723	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0724	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0725	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0726	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0727	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0728	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0729	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0730	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0731	0.204310	0.204310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0801	0.000000	0.000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

TEMPORAL FACTORS BY DATE

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91207300	0802	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	91207300	0803	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
P	91207300	0804	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0805	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
P	91207300	0806	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0807	0.204310	0.204310	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					20.00000	20.00000	20.00000	0.00000	0.00000	0.00000	20.00000	20.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0808	0.000000	0.000000								
P	91207300	0809	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	91207300	0810	0.467600	0.467600	8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
P	91207300	0811	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0812	0.467600	0.467600	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
P	91207300	0813	0.467600	0.467600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
					8.33333	8.33333	8.33333	0.00000	0.00000	0.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	8.33333
					8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333	8.33333
P	91207400	0714	0.253200	0.253200								
P	91207400	0715	0.253200	0.253200								
P	91207400	0716	0.253200	0.253200								
P	91207400	0717	0.253200	0.253200								
P	91207400	0718	0.000000	0.000000								
P	91207400	0719	0.253200	0.253200								
P	91207400	0720	0.253200	0.253200								
P	91207400	0721	0.253200	0.253200								
P	91207400	0722	0.253200	0.253200								
P	91207400	0723	0.253200	0.253200								
P	91207400	0724	0.253200	0.253200								
P	91207400	0725	0.000000	0.000000								
P	91207400	0726	0.253200	0.253200								
P	91207400	0727	0.253200	0.253200								
P	91207400	0728	0.253200	0.253200								
P	91207400	0729	0.253200	0.253200								
P	91207400	0730	0.253200	0.253200								

P	91207400	0731	0.253200	0.253200
P	91207400	0801	0.000000	0.000000
P	91207400	0802	0.253200	0.253200
P	91207400	0803	0.253200	0.253200
P	91207400	0804	0.253200	0.253200
P	91207400	0805	0.253200	0.253200
P	91207400	0806	0.253200	0.253200
P	91207400	0807	0.253200	0.253200
P	91207400	0808	0.000000	0.000000
P	91207400	0809	0.253200	0.253200
P	91207400	0810	0.253200	0.253200
P	91207400	0811	0.253200	0.253200
P	91207400	0812	0.253200	0.253200
P	91207400	0813	0.253200	0.253200

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91308100	0714	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0715	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0716	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0717	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0718	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0719	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0720	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0721	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0722	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0723	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0724	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0725	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0726	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0727	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0728	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0729	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91308100	0730	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0731	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0801	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0802	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0803	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0804	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0805	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0806	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0807	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0808	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0809	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0810	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0811	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0812	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308100	0813	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308200	0714	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000	
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91308200	0715	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0716	0.271750	0.271750	7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
P	91308200	0717	0.271750	0.271750	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0718	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0719	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0720	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0721	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0722	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0723	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0724	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0725	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	0.00000	1.00000	7.00000
P	91308200	0726	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	7.00000
P	91308200	0727	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	0.00000	1.00000	7.00000
P	91308200	0728	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	7.00000
P	91308200	0729	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
P	91308200	0730	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91308200	0731	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0801	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0802	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0803	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0804	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0805	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0806	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0807	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0808	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0809	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0810	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0811	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0812	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308200	0813	0.271750	0.271750	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000	7.00000
					7.00000	7.00000	7.00000	7.00000	7.00000	1.00000	0.00000	0.00000
P	91308300	0714	0.379800	0.379800								
P	91308300	0715	0.379800	0.379800								
P	91308300	0716	0.379800	0.379800								
P	91308300	0717	0.379800	0.379800								
P	91308300	0718	0.000000	0.000000								
P	91308300	0719	0.379800	0.379800								
P	91308300	0720	0.379800	0.379800								
P	91308300	0721	0.379800	0.379800								
P	91308300	0722	0.379800	0.379800								

P	91308300	0723	0.379800	0.379800
P	91308300	0724	0.379800	0.379800
P	91308300	0725	0.000000	0.000000
P	91308300	0726	0.379800	0.379800
P	91308300	0727	0.379800	0.379800
P	91308300	0728	0.379800	0.379800
P	91308300	0729	0.379800	0.379800
P	91308300	0730	0.379800	0.379800
P	91308300	0731	0.379800	0.379800
P	91308300	0801	0.000000	0.000000
P	91308300	0802	0.379800	0.379800
P	91308300	0803	0.379800	0.379800
P	91308300	0804	0.379800	0.379800
P	91308300	0805	0.379800	0.379800
P	91308300	0806	0.379800	0.379800
P	91308300	0807	0.379800	0.379800
P	91308300	0808	0.000000	0.000000
P	91308300	0809	0.379800	0.379800
P	91308300	0810	0.379800	0.379800
P	91308300	0811	0.379800	0.379800
P	91308300	0812	0.379800	0.379800
P	91308300	0813	0.379800	0.379800

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91308400	0714	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0715	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0716	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0717	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0718	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0719	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0720	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0721	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0722	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0723	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0724	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0725	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0726	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0727	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0728	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0729	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666

DAILY FACTORS IN PERCENTAGE OF YEAR THAT DATE
HOURLY FACTORS IN PERCENTAGE OF DAY THAT HOUR

	KEY	DATE	DAILY TSP	DAILY SO2	01 09 17	02 10 18	03 11 19	04 12 20	05 13 21	06 14 22	07 15 23	08 16 24
P	91308400	0730	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0731	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0801	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0802	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0803	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0804	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0805	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0806	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0807	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0808	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0809	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0810	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0811	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0812	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308400	0813	0.271750	0.271750	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
					4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308500	0714	0.000000	0.000000	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666	4.16666
P	91308500	0715	0.000000	0.000000								
P	91308500	0716	0.000000	0.000000								
P	91308500	0717	0.000000	0.000000								
P	91308500	0718	0.000000	0.000000								
P	91308500	0719	0.000000	0.000000								

P	91308500	0720	0.000000	0.000000
P	91308500	0721	0.000000	0.000000
P	91308500	0722	0.000000	0.000000
P	91308500	0723	0.000000	0.000000
P	91308500	0724	0.000000	0.000000
P	91308500	0725	0.000000	0.000000
P	91308500	0726	0.000000	0.000000
P	91308500	0727	0.000000	0.000000
P	91308500	0728	0.000000	0.000000
P	91308500	0729	0.000000	0.000000
P	91308500	0730	0.000000	0.000000
P	91308500	0731	0.000000	0.000000
P	91308500	0801	0.000000	0.000000
P	91308500	0802	0.000000	0.000000
P	91308500	0803	0.000000	0.000000
P	91308500	0804	0.000000	0.000000
P	91308500	0805	0.000000	0.000000
P	91308500	0806	0.000000	0.000000
P	91308500	0807	0.000000	0.000000
P	91308500	0808	0.000000	0.000000
P	91308500	0809	0.000000	0.000000
P	91308500	0810	0.000000	0.000000
P	91308500	0811	0.000000	0.000000
P	91308500	0812	0.000000	0.000000
P	91308500	0813	0.000000	0.000000

422 RECORDS PRINTED

APPENDIX H

MAJOR SOURCES FOR MODELING

SELECTED USING A VARIABLE EMISSION CUTOFF AND STACK HEIGHT LIMITATIONS

PLANT	POINT	NAME	TSP	SO2	HEIGHT	DIST	SITE
0801800450007	01	DELMARVA POWER & LIGHT EDGEMOOR POWER PLAN	71	1,250	220	25	34
0801800450007	02		43	754	220	25	34
0801800450007	03		65	1,128	220	25	34
0801800450007	05		398	7,246	275	25	34
0801800450008	01	DEL CITY POWER PLANT DP&L 800 KING ST WILM	62	10,629	500	42	34
0801800450008	02		89	15,806	500	42	34
0801800450008	03		51	8,565	500	42	34
0801800450008	04		19	1,581	500	42	34
0801800450010	01	DUPONT DE NEMOURS & CO EDGEMOOR PLANT	44	289	175	24	34
0801800450010	02		52	339	175	24	34
0801800450016	17	GETTY OIL CO DELAWARE CITY 19706	1,953	9,636	350	42	34
0801800450016	18		1,420	11,794	250	42	34
0801800450016	19			4,368	225	42	34
0801800450019	04	PHOENIX STEEL CORP,CLAYMONT 19703	605		135	19	34
0801800450019	24		147		18	19	34
0801800450021	01	SUNOLIN CHEM CO,BOX F, CLAYMONT 19703	280	1,432	300	18	34
0801800450030	09	DIAMOND SHAMROCK CHEM RIVER RD DEL CITY	214		100	40	34
0801800450032	06	ALLIED CHEM IND CHEM DIV CLAYMONT 19703		1,310	200	18	34
0801800450032	19			1,092	60	18	34
0801800450038	02	AMOCO CHEM BOX 312 NEW CASTLE DE	74	503	185	36	34
3106600450430	05	PUBLIC SERVICE ELECTRIC & GAS CO,	469	370	350	11	12
3106600450430	07		145	115	38	11	12
3106600450430	08		145	115	38	11	12
3106600450430	09		145	115	38	11	12
3106600450453	03	CONWED CORPORATION	6	45	25	6	12
3106600450454	01	AFG INDUSTRIES INC,	27	197	194	6	12
3106600450457	42	HOOKER CHEMICAL & PLASTICS CORP,	183		62	15	12
3107400450445	10	MACAMDREWS & FORBES COMPANY	18	71	90	3	28
3107400450445	11		18	71	90	3	28
3107400450446	05	VANGUARD VINYL SIDING, INC,	52	108	270	5	28
3107400450446	10		52	108	110	5	28
3107400450447	01	GEORGIA-PACIFIC CORPORATION	14	66	80	2	7
3107400450448	01	FLINTKOTE COMPANY, THE	53		101	3	5
3107400450450	31	RCA CORPORATION	26	54	165	3	5
3107400450450	44		40	1	145	3	5
3107400450452	05	KOHNSTAMM, H, & CO,, INC,	4	19	43	2	7
3107400450452	07		22	99	42	2	7
3107400450457	01	MONSANTO COMPANY	2	19	40	2	28
3107400450470	01	ALLA-OHIO VALLEY COALS INC,	47		60	4	5
3107400450482	22	CAMPBELL SOUP COMPANY	43	205	236	3	5
3107400450482	23		43	205	236	3	5
3107400450483	02	CAMPBELL SOUP COMPANY	30	140	107	2	28
3107400450483	03		30	140	107	2	28
3107400450483	04		30	140	122	2	28
3107400450483	06		14		50	2	28
3107400450488	01	HARSHAW CHEMICAL COMPANY	11	54	30	5	28
3107400450488	02		11	54	30	5	28
3107400450488	04		44		35	5	28
3107400450488	05		44		50	5	28
3107400450488	09		132		50	5	28

SELECTED USING A VARIABLE EMISSION CUTOFF AND STACK HEIGHT LIMITATIONS

PLANT	POINT	NAME	TSP	SO2	HEIGHT	DIST	SITE
3107400450488	11		11	304	285	5	28
3107400450488	15		66		30	5	28
3107400450493	11	OSBORN, C.J. CHEMICALS, INC.	36		35	4	7
3107400450517	06	OWENS CORNING FIBERGLAS CORPORATION	36	631	55	7	28
3107400450517	07		133		70	7	28
3107400450533	06	ALUMINUM SMELTERS OF NEW JERSEY, INC.	1	26	65	4	7
3107400450596	01	CAMDEN HOUSING AUTHORITY	10	20	93	2	28
3107400450598	01	CAMDEN HOUSING AUTHORITY	10	20	50	2	7
3107400450600	01	CAMDEN IRON AND METAL, INC.	30		50	3	5
3107400450629	01	COLLINGSWOOD BOARD OF EDUCATION		12	40		28
3107400450630	03	COLLINGSWOOD BOARD OF EDUCATION	7	54	50		28
3107400450639	04	PETER COOPER CORPORATION	21		42	3	7
3107400450687	02	FROSTIE ENTERPRISES	39		10	1	28
3107400450748	03	UNITED STATES GYPSUM COMPANY	36	77	70	3	28
3107400450783	01	OUR LADY OF LOURDES HOSPITAL	6	29	115	1	28
3107400450783	02		6	29	115	1	28
3107400450783	03		6	29	115	1	28
3107400450811	01	PREDCO, INC.	20		15	2	7
3107400450811	03		3	16	30	2	7
3107400450854	01	SOUTH JERSEY PORT CORP.	8	37	200	3	28
3107400450877	17	TEXACO INC	2	17	50	1	7
3107400450877	18		2	17	50	1	7
3107400450884	02	U.S. STEEL CORP.	44		33	4	7
3107400450888	11	UNITED STATES TOBACCO COMPANY	39		25	4	7
3107400450888	12		39		25	4	7
3117600450223	28	AIR PRODUCTS AND CHEMICALS, INC.		105	90	5	34
3117600450224	05	DUPONT DE NEMOURS, E.I., & CO., INC.	27	2,024	200	6	34
3117600450226	01	TEXACO INC	178	868	221	8	5
3117600450226	07			1,958	198	8	5
3117600450228	26	********TEXACO INC	110	863	105	8	5
3117600450228	30		22	131	60	8	5
3117600450228	33		29	285	115	8	5
3117600450229	01	ROLLINS ENVIRONMENTAL SERVICES, INC.	181	390	100	11	34
3117600450230	30	MOBIL OIL CORPORATION	88	180	120	6	34
3117600450230	31		28	89	150	6	34
3117600450230	36		77	245	140	6	34
3117600450230	37		29	91	140	6	34
3117600450230	39		49	155	140	6	34
3117600450230	40		64	15	110	6	34
3117600450230	41		64	201	110	6	34
3117600450230	43		24	79	90	6	34
3117600450230	44		63	200	120	6	34
3117600450230	45		63	200	120	6	34
3117600450230	51			88	125	6	34
3117600450230	53			88	125	6	34
3117600450230	55		18	56	85	6	34
3117600450230	56		35	120	112	6	34
3117600450230	59		44	105	100	6	34
3117600450230	81		26	2,376	270	6	34
3117600450230	82		26	2,376	270	6	34

SELECTED USING A VARIABLE EMISSION CUTOFF AND STACK HEIGHT LIMITATIONS

PLANT	POINT	NAME	TSP	SO2	HEIGHT	DIST	SITE
3117600450239	65	SHELL CHEMICAL COMPANY	18	182	40	3	34
3117600450239	66		18	177	40	3	34
3117600450239	67		20	68	20	3	34
3117600450253	01	ATLANTIC CITY ELECTRIC COMPANY	42	418	150	9	34
3117600450265	01	ATLANTIC CITY ELECTRIC COMPANY	6	33	37	3	34
3117600450343	01	LILLY INDUSTRIAL COATINGS, INC.	25		30	2	34
3117600450354	01	NALCO CHEMICAL COMPANY	2	17	30	2	34
3129800450487	11	HOMASOTE COMPANY	118		45	26	12
3129800450487	14		127		45	26	12
3129800450524	01	COGENERATION DEVELOPMENT CORP.	12	125	164	26	12
3129800450524	02		12	125	164	26	12
3129800450524	03		23	116	164	26	12
3129800450524	04		23	116	164	26	12
3149000450098	01	ATLANTIC CITY ELECTRIC COMPANY	77		176	28	34
3149000450098	04		57	1,673	176	28	34
3149000450098	06		289	4,389	175	28	34
3149000450098	07		71	2,081	224	28	34
3149000450098	08		124	3,657	226	28	34
3149000450100	01	ANCHOR HOCKING CORPORATION	41	964	138	32	34
3149000450100	02		73	180	107	32	34
3149000450100	03		42	920	54	32	34
3149000450100	07		5	147	55	32	34
3149000450100	08		5	153	40	32	34
3149000450103	79	GOODRICH, B.F. CHEMICAL CO.	61	125	60	17	34
3149000450103	87		35	422	60	17	34
3149000450113	01	NL INDUSTRIES, INC.	15	306	80	18	34
3149000450161	73	DUPONT DE NEMOURS, E.I., & CO., INC.	3	790	175	27	34
3912000450013	08	H & K QUARRY-BLOOMING GLEN	213			37	12
3912000450020	06	UNITED STATES STEEL CORP.FAIRLESS	200	1,690		23	12
3912000450020	07		691		150	23	12
3912000450020	09		1,675	1,509	161	23	12
3912000450020	21		2,283	462		23	12
3912000450020	31			155	152	23	12
3912000450020	32			217	153	23	12
3912000450020	33		135		32	23	12
3912000450020	37			485	116	23	12
3912000450020	40			1,305	92	23	12
3912000450020	44		258			23	12
3912000450020	48		277			23	12
3912000450020	49		294	7		23	12
3912000450020	50		162			23	12
3912000450020	54		258			23	12
3912000450023	10	HETTER MATERIALS CORP.	215			19	12
3916600450020	01	WARNER CO.	235	67	64	27	8
3916600450023	01	PHILADELPHIA ELECTRIC CO.CROMBY	1,934	9,850	300	31	8
3916600450023	02		177	4,216	300	31	8
3923600450013	01	PHILADELPHIA ELECTRIC CO.CHESTER	8	197	195	14	34
3923600450014	01	PHILADELPHIA ELECTRIC CO.EDDYSTONE	78	3,371	248	10	34
3923600450014	02		4,386	21,785	248	10	34
3923600450014	03		16	2,279	249	10	34

SELECTED USING A VARIABLE EMISSION CUTOFF AND STACK HEIGHT LIMITATIONS

PLANT	POINT	NAME	TSP	SO2	HEIGHT	DIST	SITE
3923600450014	04		18	2,503	249	10	34
3923600450016	04	SCOTT PAPER CO.	23	165	180	13	34
3923600450019	01	WESTINGHOUSE ELECTRIC CORLESTER	10	112	175	9	34
3923600450019	02		11	127	175	9	34
3923600450028	27	GENERAL CRUSHED STONE CO.GLEN MILLS	188			24	8
3960000450015	05	GILL QUARRIES, INC. FAIRVIEW	135			21	8
3960000450015	07		135			21	8
3960000450015	09		167			21	8
3960000450023	04	GLASGOW INC. IVY ROCK	410			13	8
3960000450023	06		180			13	8
3960000450023	07		137			13	8
3960000450023	08		137			13	8
3960000450034	31	CORSON, G. & W. H. INC.	254			12	8
3960000450034	32		305			12	8
3960000450034	37		235			12	8
3960000450034	38		282			12	8
3960000450057	03	SIMPSON PAPER CO. MIQUON	9	88	81	7	8
3960000450058	15	FIRESTONE TIRE & RUBBER CPOTTSTOWN	8	101	109	43	8
3960000450058	16		6	828	109	43	8
3960000450058	17		10	122	109	43	8
3960000450058	28		555			43	8
3960000450058	30		276			43	8
3960000450058	31		183			43	8
3971600451501	22	ATLANTIC RICHFIELD CO, 3144 PASSYUNK AVE	25	266	46	4	5
3971600451501	25		31	346	110	4	5
3971600451501	26		9	120	130	4	5
3971600451501	27			3,850	230	4	5
3971600451501	35		4	39	160	3	5
3971600451501	46		16	177	80	3	5
3971600451501	47		13	147	80	3	5
3971600451501	48		13	147	80	3	5
3971600451501	49		16	176	80	3	5
3971600451501	50		8	88	80	3	5
3971600451501	54		34	364	173	4	5
3971600451501	55		20	233	110	4	5
3971600451511	03	GULF OIL CO OF PENNA, 30TH & PENROSE AVE	37	329	150	5	5
3971600451511	07		105	1,018	200	5	5
3971600451511	20		24	364	150	5	5
3971600451511	60			1,681	150	5	5
3971600451511	77		4	64	32	5	5
3971600451511	80		43	413	200	6	5
3971600451511	81		43	413	200	6	5
3971600451511	82		43	413	200	6	5
3971600451511	83		55	532	200	6	5
3971600451511	84		85	823	200	5	5
3971600451511	85		85	823	200	5	5
3971600451531	39	ROHM AND HAAS CO, 5000 RICHMOND STREET	2	113	117	4	7
3971600451531	40		2	113	117	4	7
3971600451531	41		2	113	117	4	7
3971600451541	34	NL INDUSTRIES, 2545 ARAMINGO AVE	2	15	60	1	7

SELECTED USING A VARIABLE EMISSION CUTOFF AND STACK HEIGHT LIMITATIONS

PLANT	POINT	NAME	TSP	SO2	HEIGHT	DIST	SITE
3971600451551	08	ALLIED CHEMICAL CORP, MARGARET & BERMUDA	31	172	135	3	7
3971600451555	01	CROWN CORK AND SEAL, 9300 ASHTON ROAD	1	14	46	1	12
3971600451555	02			7	46	1	12
3971600451561	01	ALDAN RUBBER CO, TIOGA & SALMON STREETS	1	8	30	1	7
3971600451562	23	AMSTAR CORP, DELAWARE AVE & REED STREET	4	36	320	2	5
3971600451562	24		4	36	320	2	5
3971600451562	25		4	36	320	2	5
3971600451562	26		4	36	320	2	5
3971600451562	27		4	36	320	2	5
3971600451563	01	BUDD CO, RED LION & VERREE ROADS	4	78	35	4	12
3971600451563	02		4	78	35	4	12
3971600451563	03		4	78	35	4	12
3971600451566	01	CONTAINER CORP OF AMER, 5000 FLAT ROCK	203	386	175	4	8
3971600451566	02		16	132	175	4	8
3971600451576	06	PHILA COKE DIV, 4501 RICHMOND STREET	134	13	300	3	7
3971600451588	23	NATIONAL SUGAR CO, 1037 N DELAWARE AVE	15	116	201	3	7
3971600451588	24		15	116	201	3	7
3971600451589	07	CELOTEX CORP, 3600 GRAYS FERRY AVENUE	2	20	100	3	5
3971600451589	08		2	20	100	3	5
3971600451593	01	AMERICAN BILTRITE INC,9401 BLUE GRASS RD	1	6	29	1	12
3971600451606	01	J D MORRISSEY INC, GRANT AVE & RAILROAD	4				12
3971600452001	01	ACME MKTS-DISTR CTR 1, 59TH & UPLAND WAY	3	32	150	2	8
3971600452004	01	ANCHOR DYEING, ADAMS & LEIPER	3	29	40	3	7
3971600452007	01	ATLANTIC METALS, ORTHODOX & DELAWARE RIV	1	20	70	1	7
3971600452007	08		7	20	60	1	7
3971600452009	01	CONNELLY CONTAINERS INC, 4368 MAIN ST	6	50	40	2	8
3971600452015	02	FRANKLIN SMELTING, CASTOR-E OF RICHMOND	8	21		1	7
3971600452015	03		32	180	40	1	7
3971600452019	01	GLOBE DYE WORKS, 4500 NORTH STREET	2	19	80	3	7
3971600452037	04	GFI CHEMN PRODUCTS, 2121 E WHEATSHEAF LN	18		30	2	7
3971600452044	01	C SCHMIDT & SONS, 127 EDWARD STREET	7	71	170	3	7
3971600452046	01	SIMONINS SONS INC, TIOGA & BELGRADE STS	3	25	100	1	7
3971600452058	01	CHEMTRON, MILNOR & BLEIGH STS	8	77	20	5	12
3971600452059	02	INOLEX CHEMICAL, JACKSON & SWANSON STS	2	19	120	3	5
3971600452079	01	QUAKER LACE CO, 4TH & LEHIGH AVENUE	3	26	75	3	7
3971600453077	01	CONTINENTAL CAN CO, 9820 BLUEGRASS ROAD	1	10	20	1	12
3971600453084	01	DELAWARE ALLOY FORGE CO, 2300 E TIOGA ST	1	7	30	1	7
3971600453084	02			8		1	7
3971600453197	01	KEYSTONE-MUTUAL SHOEMAKER,3000 E ONTARIO	2	11	32		7
3971600453332	01	UNITED CONTAINER CO, 9230 ASHTON ROAD	1	9	75	1	12
3971600453332	02		15		75	1	12
3971600453334	01	VICTOR DYE WORKS, TULIP & WESTMORELAND	1	6	72	1	7
3971600453462	01	DEL VALLEY WOOL SCOURING, 3419 RICHMOND	1	7	50	1	7
3971600453481	01	DAVID WEBER CO, 3500 RICHMOND ST	4				7
3971600453481	02		1	12	60	1	7
3971600453488	01	A.P.GREEN,HELDLEY & DELAWARE RIVER	1	20	30	2	7
3971600453489	01	NEWMAN & COMPANY, 6101 TACONY STREET	14	138	87	5	7
3971600453629	01	ACME HARDESTY INC, 3512 CEDAR STREET	1	9	45	1	7
3971600453629	05		1	6	60	1	7
3971600453648	01	NEATSFOOT OIL REF INC, ONTARIO & BATH ST	1	12	75		7

SELECTED USING A VARIABLE EMISSION CUTOFF AND STACK HEIGHT LIMITATIONS

PLANT	POINT	NAME	TSP	SO2	HEIGHT	DIST	SITE
3971600454003	01	CONRAIL, PIER 122 SOUTH	160			5	5
3971600454003	02		150			5	5
3971600454901	14	PHILA ELECTRIC CO, 1325 N BEACH STREET	5	792	200	2	7
3971600454902	01	PHILA ELECTRIC CO, 900 SANSOM STREET	2	69	375	1	5
3971600454902	02		2	69	375	1	5
3971600454902	03		1	83	375	1	5
3971600454902	04		1	83	375	1	5
3971600454903	11	PHILA ELECTRIC CO, 3901 N DELAWARE AVE	1	281	172	2	7
3971600454903	12		1	281	172	2	7
3971600454904	01	PHILA ELECTRIC CO, 2600 CHRISTIAN STREET	14	532	227	1	5
3971600454904	02		14	532	227	1	5
3971600454904	03		35	1,059	275	1	5
3971600454904	04		4	185	232	1	5
3971600454904	05		4	185	232	1	5
3971600454904	06		11	516	255	1	5
3971600454905	01	PHILA ELECTRIC CO, 2501 S DELAWARE AVE	3	297	275	4	5
3971600454905	02		3	297	275	4	5
3971600454905	03		3	297	275	4	5
3971600454905	04		3	297	275	4	5
3971600454906	04	PHILA ELECTRIC CO, 9TH & WILLOW STREETS		32	183	2	5
3971600454906	05			32	183	2	5
3971600454906	06			32	183	2	5
3971600454921	02	PGW-STATION A, 28TH & PASSYUNK AVE	4	50	155	3	5
3971600454921	05		1	37	165	3	5
3971600455005	01	FC HAAB CO,MORRIS ST & SCHUYLKILL RIVER	2	21		3	5
3971600456844	01	9801 ASSOCIATES, 9801 BLUEGRASS ROAD	2	21	40	1	12
3971600456847	01	MILNE BUILDING, 1035 S 10TH STREET	1	11	65		5
3971600456950	01	401 NORTH CORP, 401 N BROAD		8		1	5
3971600458017	01	DAROFF DIV EINSTEIN MED CTR,1429 S 5 ST	1	15	160	1	5
3971600458022	01	INGLIS HOUSE, 2600 BELMONT AVENUE	1	12	40		6
3971600458042	01	PENNA HOSPITAL INST, 4820 HAVERFORD AVE	4	38	125	4	8
3971600458045	01	CHILDRENS HEART HOSP,3955 CONSHOHOCKEN		3	40		8
3971600458310	01	BARTLETT JR HIGH,11TH AND CATHARINE	1	6	128		5
3971600458903	01	PHILA COL OF OSTEO MED,4150 CITY AVE	2	16	79		8
3971600458904	01	ST JOSEPHS COL,54TH AND CITY AV	1	14	50	1	8
3971600459401	01	PHA-LIDDONFIELD HOMES,8800 JACKSON ST	3	30	35	3	12
3971600459402	01	PHA-SOUTHWARK PLAZA,1024 S 4TH ST	4	39	152	1	5
3971600459403	01	PHA-KING PLAZA,1241 CATHERINE ST	3	25	148		5
3971600459403	02		2	19	148		5
3971600459504	01	E C INCINERATOR, DELAWARE & SPR GRDN ST	202	110	123	3	7
3971600459504	02		160	110	123	3	7
3971600459505	01	N W INCINERATOR, DOMINO & UMBRIA	210	117	140	4	8
3971600459505	02		210	117	140	4	8
3971600459702	04	U.S. NAVAL BASE, PHILADELPHIA	48			6	5
3971600459702	06		5	48	90	6	5
3971600459702	07		5	48	90	6	5
3971600459702	08		5	45	90	6	5
3971600459702	09		5	48	90	6	5
3971600459702	10		5	48	90	6	5
3971600459706	01	NAVAL HOSPITAL, BROAD & PATTISON	7	67	175	4	5

300 RECORDS PRINTED